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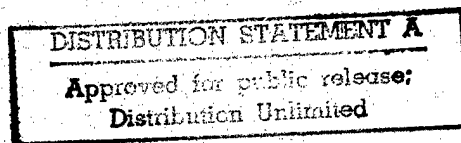
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13 June 1983

# East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2410



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13 June 1983

# EAST EUROPE REPORT

## ECONOMIC AND INDUSTRIAL AFFAIRS

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FOREIGN TRADE 'EXPERIMENT' DISCUSSED IN EDITORIAL

Bratislava PRAVDA in Slovak 27 Apr 83 p 1

[Editorial: "Production and Foreign Trade"]

[Text] Only the best merchandise is exchanged on world markets. We, too, when we make purchases abroad, want high quality and everything that goes with it. Then when this or that item is seen in a shop window or a new piece of equipment comes to a factory with inscriptions in a foreign language, there are people who ask why we, too, do not produce all important things with such high standards? The question is logical--the only thing illogical is that it is usually asked by those who violate technological discipline, design and plan equipment with lower parameters than the competition but do not do their own work with maximum care and attention. Ours is a country largely dependent on manufacturing industries and so we have to adapt ourselves all the more to foreign markets. This has often been emphasized--with special urgency at the Seventh Plenum of the CPCZ Central Committee in December of last year. On this theme, Comrade Gustav Husak said: "The focus of current tasks of the Czechoslovak economy is directed toward adapting more rapidly to the demanding and rapidly changing conditions of the world economy. We must do everything possible to keep in step...with sharp competition in the world from which we are not and must not be isolated."

Many of our products are famous on foreign markets and several of our enterprises have firm orders for years ahead. Unfortunately, there are also losses. The causes are often assigned to intangible, objective reasons. In other instances, the foreign-trade organizations put the blame on production, that they are getting along very comfortably and production reciprocated by declaring that if they knew how to sell they would do so.

In order to find the truth one must investigate every single case separately. But we do know what applies universally: that neither on one side nor the other is everything in order.

Production enterprises, VHJs [economic production units] and, in more extensive relationships, even the ministries, were protected from the hard struggles taking place in foreign markets and the high winds stirred up by rapid advances in science and technology for the most part blew over their

heads. The losses and risks which were incurred were absorbed by all of society. Many became used to it and considered a cozy life an natural. Experts from the Ministry of Finance again confirmed this while analyzing the economic operations of enterprises in the past year--in many cases they did not know the technical standards of the competition's products, they did not know the selling price, which way demand was developing or what customers were asking for at the time.

The managers of enterprises and organizations to whom the preceding lines are "dedicated" will not welcome their contents. They can reject the criticism by referring to the fact that competition is getting stiffer all the time (which is no reason for complaining, but rather for greater exertion of creative powers), that as concerns physical sizes, the situation on world markets is not changing from where it is (miniaturization in many areas strengthens the tendency toward a decline) or they draw attention to differing conditions in socialist and capitalist markets (but everyone who is in business must take that into account). We could go on and expand the list of difficulties but it is not necessary because not one of them is justified. As one of the authors of the Set of Measures typically remarked, "After all, the world is not set up so as to be completely at the disposal of our production."

It would be unfair if we did not mention that in the SSR since 1976 and in Bratislava since 1977 the quality of products and their salability on foreign markets have been increasing, but those are still only the first steps toward the goals outlined for this area by the 16th CPCZ Congress and the CPSL Congress.

When it comes to criticism of shortcomings, the foreign-trade organizations must admit their share together with the departmental ministries. Their sins are harder to prove than those of production, but it is known that more than once they missed an opportunity, they came late or succumbed to pressure and accepted worse business terms than necessary.

Our foreign trade has been operating thus far in a ponderous way (not denying it all due credit). Analysis has shown that part of this is due to its present organizational structure. Now the time has come for it, too, to recognize the changes that have come about... The building of a socialist society has progressed to a developed form; external conditions have become complicated; the depth of conflicts in the world of exploitation and everything that goes with them have increased. These facts were the basis for consideration of measures which would support and arouse interest in changing our economy more definitely than heretofore in the international division of labor and, naturally, also in both world markets. And because these as well as those, foreign trade and production, are two sides of the same coin, the result is that the measures must have a bilateral effect.

The first steps in their formation were made by the Set of Measures. Which way and how far to go were stated in the Set's introduction in which the Presidium of the CPCZ Central Committee and the Federal Government underlined

the principle that, as an essential part of efforts to improve planned management, specifically, that it is "essential to strengthen economic stimulation of the growth of efficient development not only from the viewpoint of meeting the planned volume of exports but especially from the viewpoint of the growth of foreign prices attained."

The best experts in theory and practice worked on the application of these principles. In addition, they also made use of Soviet experiences which--as we perhaps can say--found general application to this area, too, in a passage of the general secretary of the CPSU Central Committee, Comrade Yuri Andropov, published on 24 February. We quote from it: "...once again we may repeat Marx' basic precept according to which the acceleration of the development of production forces calls for suitable forms of organization of economic life, but the matter will not move from there until this theoretical truth is transferred into the specific language of practice."

In the interest of increasing the efficiency of production enterprises and attaining better commercial results in our foreign-trade organizations, in the interest of intensifying cooperation between these two partners vitally dependent on one another, a new economic experiment was started which is to test new organizational and economic forms.

According to the first variant of the experiment, an economic and organizational interconnection of production and foreign trade will be effected in such a way that the foreign-trade organization, or a part of it, will be incorporated into the VHJ as an enterprise or organizational component of general management. This variant is being tested in the Sigma Olomouc VHJ, the High Voltage Electrical Engineering Works Prague, Chirana [National Enterprise for the Production of Medical Appliances and Surgical Instruments] Stara Tura, the Martin Heavy Engineering Works [ZTS] and Czechoslovak Musical Instruments Hradec Kralove.

The second variant involves typically "only" economic interconnection of production and foreign trade. The trade group involved remains organizationally a part of its parent organization and acts abroad in its name, but to the account of the VHJ. Those being tested are AZNP [Automobile Works National Enterprise] Mlada Boleslav with the Motokov trade group, Agrozet and Martin ZTS with other groups of Motokov and Tesla Brno with one group of Kovo.

Although the group in the experiment is not large, all exporting enterprises ought to carefully follow the results and procedures. This is an experience of experimenting based on preparation from the Set of Measures. Those enterprises that were informed faced the new conditions well prepared and more successfully than others.

Getting a head start is also important for party work, which must politically prepare all those involved for the important change in economic conditions. This is a job which is all the more difficult because our knowledge here has a potential tendency to lag behind and, furthermore, the problem complex of economic information, as one of the forms of social consciousness, is not as well researched as would be required.

Before the new changes are made, conflicts may arise. Communists on any level of management will certainly take the proper attitude. Why do we mention this in advance? According to the rules of the experiment, as opposed to present practice, the export assignment is considered fulfilled only after the exported goods have crossed the border. The economic results of the foreign trade, profit or loss, are projected into the overall economic results of the production organizations and the monetary incentive is linked with them. Stocks and supplies of export goods here and abroad are handled through the VHJ and the same with export claims and obligations.

The experiment has been received with understanding in some places and elsewhere with doubts, nor was there any lack of apprehension. But that is the way all new things are greeted. So let us not forget that the experiment is deeply affecting habits which we could not include as virtues. Also eager to see the experiment run as successfully as possible are the party organizations, to whom the CPCZ Central Committee as early as 1980 said that, "in the course of implementing the Set of Measures the leading and controlling function of the party in economic life will increase in importance."

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## SSR MINISTER URGES WELL-SUPPLIED MARKETS FOR CONSUMERS

Bratislava ROLNICKE NOVINY in Slovak 23 Apr 83 pp 1, 3

[Interview with SSR Minister of Trade Jaroslav Zelko, conducted by Vladimir Fapso: "A Well-Supplied Market--The Basis of Satisfaction"; in Bratislava, date not given]

[Text] Domestic commerce related to the assurance of human nutrition is based not only on the socioeconomic development of society but also on the planned implementation of the rational nutrition program. This program formulates commercial objectives in such a way as to expand the food product mix consistent with rational nutritional needs and so as to restrict excessive food consumption. Concurrently, the program emphasizes the systematic promotion, through a nutrition education program, of progressive nutritional needs and production and consumption of food that corresponds to a socialist lifestyle. The role of commerce in the realization of these objectives was the subject of our interview, during a break in the discussions at a conference of the Bratislava I district committee the CPCZ, with the SSR Minister of Trade, Jaroslav Zelko, who shared with us a portion of his speech.

[Question] Comrade Minister, domestic commerce directly affects every citizen, every consumer. What steps are you taking to achieve stability in the domestic market?

[Answer] Our primary efforts are directed at assuring a smooth flow of supplies, thereby creating certainty by the consumer that all basic types of consumer goods will be available. Secondly, we strive to assure a proper balance in the mix of available products. To be more specific: the sale of foodstuffs must be based on certainty that supplies will be available, and the sale of manufactured goods on customer satisfaction, both of which stem from the objectives set by the 16th CPCZ Congress. In terms of food, there must be an efficient application of the principles of substitution and complementarity in the production and sale of food, in the creation of the requisite inventories and the development of deliveries from producers. We are seeking, in other words, to develop effective relationships for supplying the domestic market, primarily between the main groups of foodstuffs, such as flour, grains, meats, fats, sugar, fruits and vegetables, and the products made from them. We are for the most part successful in maintaining adequate inventories of the foregoing, meaning that there are no fluctuations in supplies.

[Question] What influence does commerce have on optimizing the breadth of the available mix of foodstuffs?

[Answer] It exerts an influence in the sense of assuring differing nutritional needs of the population in a physiological sense, i.e., scientifically documented needs according to age, state of health, style of life and working conditions. It also exerts an influence in a socioeconomic and territorial sense, with a tendency to minimize the movement of food between production areas.

[Question] In your opinion, what are the most pressing problems you face?

[Answer] Although there are several of these, the most pressing ones lie in the area of the production and sale of milk, bread and other products related to these basic components of human nutrition. From producers, we will require milk with a guarantee of 3-day freshness, and from bread producers, vacuum packaging and a more diversified product mix, by offering packages with differing weights. There must be more effective packages available and better packaging material must be used. In the sector which I direct, we are aware that these are exceptionally difficult tasks, but also that we are justified in requesting from industry the quickest possible resolution of these problems, especially in that part of the food industry that processes milk.

[Question] And although the supply of industrial goods has improved, it is still stagnant. Why?

[Answer] It is unfortunate that we are experiencing stagnation, despite a high level of personal consumption by our citizens and the presence in many households of consumer durables. Therefore, our most pressing task is to achieve a higher growth rate in sales of manufactured goods. Our primary emphasis must be on providing a more varied supply of goods, greater quality in specific product lines, as well as on the elimination of current structural and product-mix conflicts in manufactured goods. The commercial and production sectors determine the supplying of the domestic market under given economic conditions, in accordance with planned objectives for specific time periods and the development of needs on the domestic market. Conflicts in these areas arise mainly when a solution depends primarily on external circumstances, such as the availability of raw materials to meet production targets and, sometimes, the necessity for adapting rapidly to changing market conditions.

[Questions] Conflicts which are arising in the provision of capital for the domestic market are evident most concretely in shortages of specific types of foodstuffs and manufactured items.

[Answer] We will be emphatically insisting on the fulfillment, throughout the entire year, of supplier-consumer relationships between producers and sellers. I am confident that we will achieve the effect we desire. Bear in mind that current conflicts amount to a half billion korunas of value in

foodstuffs and almost Kcs 2 billion in manufactured goods. At first glance these are not high levels when compared with the planned retail trade turnover in the SSR of about Kcs 85 billion. But we still want to be successful in resolving these shortcomings because they exist for the most sought after products.

[Question] How do you intend to meet your targets in the remaining years of the Seventh 5-Year Plan?

[Answer] Primarily by making use of underutilized capacity in our work force and by looking for new techniques, forms and mechanisms for carrying out trade. These must be directed at increasing consumer satisfaction in the meeting of their material needs in the domestic marketplace. A significant role will be played in this by the implementation of the principles of a unified socialist trade policy which will be approved on an annual basis by the SSR Government. We also anticipate that this policy will be discussed at the highest political and state organs. In line with the new law concerning domestic commerce, trade policy no longer has a sectorial character, but has become a mechanism for sectorial administration and the assurance of the public objectives of domestic commerce. The principles of a unified socialist trade policy, then, extend to all organizations which engage in commercial activity as defined by the new law. And this obligates them to still more responsibly adhere to the principles approved by the government. This year, for instance, the focus is on the stabilizing of food sales and the growth rate for manufactured goods, with particular emphasis on selected product lines. Attention is also to be paid to expanding our independence in vegetable production along territorial lines and on the best possible use of domestic fruit sources. In the area of manufactured goods, emphasis is being placed on increasing the availability of products in short supply, on delivering first-quality products and on increasing the overall quality of consumer goods.

[Question] Trade policy is often mentioned in conjunction with research on markets and consumer demand.

[Answer] One might add that the tone of such comments is critical, and this should give us further pause. The situation is very complex, not only in the area of consumer demand, but also in consumer behavior. The system for market research has been elaborated well at a theoretical level. Already, within the framework of cooperation among the countries of the CEMA, the CSSR is responsible for market research related to its own internal trade. The problem lies, however, in the utilization of this information to facilitate cooperation between the producer and the seller. By the same token, the results of long-term plans for product-mix development formulated by the commercial sector are not as yet binding for producers.

[Question] Put simply--market research in our country has a primarily sectorial focus nevertheless, is this not true?

[Answer] This is particularly true for the commercial sector, although the boundaries for cooperation between the commercial and the manufacturing

sector have not been set precisely as they relate to market research. On the other hand, it is the commercial sector which normally presents the producers, especially in the use of goods in short supply, with the more rigorous requirements, because they often include back orders from past years which sometimes have a negative impact on commerce itself. Sometimes, however, even the commercial sector does not recognize factors which may influence changes in consumer preferences. As an example, I can cite the lowering of retail prices for clothing made from synthetic fibers in 1981, a move which rapidly led to increased consumer demand, while the contracts between producers and sellers for the upcoming period had already been signed at lower delivery levels.

[Question] Is it possible to foresee a greater influence on production, thereby remedying some of the gaps in the current system for market research?

[Answer] We have in hand new methodological guidelines for the performance of market research related to domestic commerce which are to take effect as of 1 July 1983. One may assume that they will have a greater impact on production and also that they will remedy certain gaps in current market research related to domestic commerce and, in addition to this, in relation to the production sector and other organs.

[Question] The objectives of commerce which we have so far been discussing may be assured and implemented only in close conjunction with production, or with the assistance of other branches, organizations and organs.

[Answer] A critical role in the fulfillment of these objectives will be played by active participation in domestic commerce generally and by each specific sector in particular. In this regard, it is necessary to emphasize the consistent implementation of a new law of the Slovak National Council concerning domestic commerce and its implementing regulations. This law creates the preconditions for improved and more efficient commercial work that we want to implement thoroughly at all management levels. The CPCZ Central Committee and the highest state organs are firmly introducing a system of efficiency, managerial competence and valuation. Therefore we as well, employees of the commercial sector, are obligated to implement this process in practice. We understand the valuational process as a system for the functioning of commerce and the supplying of quality goods, the result of which will be consumers satisfied with commercial activities.

[Question] The commercial sector should apply the guidelines for the valuational process at the production stage as well. This might occur, for instance, when wrapping vegetables or fruits, or during the final preparation of manufactured goods.

[Answer] This is correct. Such an approach would make it possible to achieve greater savings of raw materials and energy at the same time that consumer needs are being better satisfied. While the commercial sector does not provide for the valuation of goods in production, it has to develop with its own resources an appropriate valuational process to cover the entire range of the product mix in domestic commerce. Much also depends on

how goods are displayed in sales outlets, how they are presented, how well we know how to sell them and how they are handled. We are, therefore, taking all possible measures, beginning with an increase in the quality of the material and technical base of commerce right through adherence to the principles of cleanliness, esthetics, order, hygiene and labor quality in all operational commercial units. We are also striving to see to it that the management system for domestic commerce is still more effective, in terms of both vertical and horizontal management links. We, therefore, emphasize the priority nature of management, in which senior employees must display professional, political and qualitative qualifications for the system of domestic commerce, bringing this system directly into contact with the personnel field. Every organizational component of the commercial sector--ministries, general directorates, the commercial enterprise, factory and operational unit--has concrete management tasks. At the same time, these may not be separated from their operations. On the contrary, there must be an organic coordination of management with operations. This is a matter, in other words, of the organization of managerial work within domestic commerce and of the resolution of related problems. It is our desire that the increasing sophistication of managerial work in the commercial sector be definitely felt by our citizens as consumers in every retail unit.

[Question] It is especially necessary to evaluate the efforts of the domestic commercial sector in the creation and implementation of innovative programs and developmental concepts for the foodstuff product mix.

[Answer] The CSR and SSR ministries of trade developed The Main Directions for the Development of the Foodstuff Product Mix for the 1976-1980 Period, the implementation of which in the relevant VHJs represented a contribution to the enrichment of the domestic market in all foodstuff groups. It must be critically noted, however, that during the period mentioned above many of the objectives of the innovational process for foodstuffs were not achieved. Moreover, for the Seventh 5-Year Plan we presented the production sector with many suggestions for foodstuff innovations, focusing mainly on rational nutrition, extending the shelf life of food products, saving time in food preparation in households, and on the function and esthetic sophistication of food packaging. A more assertive attitude to the implementation of food-product innovations depends also on closer links to specific conceptions of product-mix development. In the 1975-1980 period, the commercial sector developed 11 concepts covering the period through 1985 or 1990, which included for practical purposes the entire foodstuff product mix of our domestic market. In this year and next, we are expecting the implementation of the fifth conception for the period to 1990. Individual VHJ from the food industry take an active part in the formulation of all conceptions, which are then approved by the advisory board of the minister of trade. We are, therefore, fully justified in expecting that these concepts will be the more meaningful to the production sector. In the foregoing manner, we want to achieve a more intensive and dynamic approach to innovation in the foodstuff product mix so as to reach its full social, economic and nutritional justification on the market, in other words so that the innovational process can assure the requisite degree of social

utility for the product mix that is introduced and assist in realizing a higher valuation of raw materials.

[Question] What is your opinion of cooperation between primary agricultural production, the food industry and domestic commerce?

[Answer] Primary agricultural production, the food industry and domestic commerce each have their own roles in assuring the feeding of the population. Jointly, however, they must see to it that there be an increase in the processing of food for the preparation of meals to achieve desired savings in raw materials and energy, and to increase the degree of satisfaction of the higher needs of the people. The mutual cooperation of these three sectors can, then, in close conjunction, achieve an improved degree of fulfillment of the objectives in the implementational program for rational nutrition.

Let us be somewhat specific. The necessary packaging and preparation of goods must be performed where it is done most efficiently and at the least cost. A change in the miller's key makes possible an increase in the percentage of grain products destined for human consumption and a reduction in its use as livestock feed. The commercial sector must react in its operations to a given situation on the domestic market and, depending on existing resources, assure the smooth physical movement of quality food-stuffs to the consumer. I am convinced that through a cooperative approach by commerce and industry, in which a special place will be reserved for merged socialist commitments and the development of worker initiatives along economic and professional lines, as well as for effective organizational and managerial work, we will be able successfully to meet our objectives even under complex conditions.

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CSO: 2400/261

## AGRICULTURAL LAND DEPLETION IN CSR ANALYZED

Bratislava EKONOMIKA POLNOHOSPODARSTVA in Czech No 4, 1983 pp 169-171

[Article by Eng Josef Francik, CSc, CSR Ministry of Agricultural and Food:  
"More Efficient Conservation and Use of Our Agricultural Land Resources"]

[Text] The agricultural land resources in our republic are justifiably at the forefront of the attention of all society. The basic approaches to better management of these resources were highlighted at the 16th CPCZ Congress and the Fourth Plenum of the Central Committee in 1981. Our agricultural land, as a basic means of production, indisputably plays an essential role in the task of increasing our self-sufficiency in the area of food production. Therefore Husak's statement at the 16th CPCZ Congress, that "it is in the vital interest of our entire society to conserve every acre of soil and not allow risks to be taken with it," resound today with even greater urgency than ever before and must be an unambiguous guide for the future progress of everyone who has anything at all to do with our land resources.

Czechoslovakia's agricultural land area (as of 1 January 1982) amounts to 4,369,811 hectares, of which 3,291,944 hectares is arable land. This amounts to 0.424 hectares of agricultural land per capita, of which 0.319 hectares is arable land. These figures put us into the class of countries with the smallest [per capita] land area. There are also significant differences between the different regions of the CSR, as can be seen from Table 1. One should note that these per capita amounts of land include areas of land which are temporarily unutilized or offer limited possibilities for farming, etc. Nor is the quality of our agricultural land resources especially favorable, in that 30 percent of it is land of low or negligible productivity. There was significant land depletion in the period of post-war intensive development and industrialization of the national economy, and when all land not suitable for use in a socialist production capacity was removed from the land fund. Even during the fifth and sixth 5-year periods 95,441 hectares were lost in the CSR. Also partially responsible for this increased loss of land is the physical inventory process, which removed from the files plots which were no longer worth cultivating and could not be cultivated even in the future (plots which had earlier been abandoned, woods, regulated builtup banks of streams and rivers, peat bogs, etc.). This process, however, revealed a fair amount of reserve land which could at some point be put into use.

The most important activities responsible for removing land from agricultural use continue to be capital construction and mining. During the Sixth 5-Year Plan, the CSR lost an average of 4,264 hectares annually to capital construction, while in 1981 the figure was 2,980 hectares of agricultural land. The highest demands for land are for the comprehensive construction of dwelling units and public facilities, followed by communications.

The law on the conservation of agricultural land resources has undergone its requisite development since 1959. It was formulated in 1966 in basic form and passed as Law No 53; it is still valid with the amendments of 1976. Despite the fact that its elaboration and associated regulations rank this law among the most outstanding items of legislation of its type, it could not by itself assure that greater care would be given to our agricultural land. The decisive factor is invariably how our entire society approaches the problem and how consistently this law is enforced. Greater control over this process is an essential component of the path which we have set ourselves toward intensification of the entire national economy, increased utilization of our own resources and taking measures to compensate those who supply domestic products. Integral factors in the comprehensive care of our agricultural land resources are conservation, reclamation and land utilization.

New measures passed by the federal government and the Government of the CSR in 1981 and 1982 (Law No 292/1981 of the Government of the CSSR and Law No 28/1982 of the Government of the CSR) define more precisely the approaches which are being projected, primarily in the areas of territorial planning, more consistent restriction of the removal of high-quality land from agricultural use, direct governmental action in deciding on the removal [from agricultural use] of specially conserved land, the introduction of compensation of recultivation, the preparation of a more efficient economic apparatus for the near future, and the tasks of using even tiny, relatively inaccessible plots and mobilizing existing land reserves. The prognosis for long-range development of the agricultural land resources of the CSR, if care is taken for their consistent conservation, counts on our having 4.32 million hectares of agricultural land in the year 2000, of which 3.27 million will be arable land (i.e., yearly losses of 2,700 and 1,200 hectares, respectively).

Table 1. Per Capita Land Area in the CSR [in hectares]

<u>Region</u>	<u>Agricultural land</u>	<u>Arable land</u>
Prague and	0.302	0.252
Central Bohemia	0.850	0.601
Southern Bohemia	0.600	0.413
Western Bohemia	0.338	0.237
Eastern Moravia	0.544	0.397
Southern Moravia	0.446	0.363
Northern Moravia	0.291	0.212



Table 2. Structure of Agricultural Land Use as of 1 January 1982  
in the CSSR

<u>Land Use--Type of Crop</u>	<u>Hectares</u>	<u>%</u>
Arable land	4,808,539	70.3
Hop gardens	12,199	0.2
Vineyards	46,777	0.7
Truck farms	227,193	3.3
Orchards	75,685	1.1
Meadows	845,012	12.3
Pastures	827,263	12.1

#### Basic Viewpoints on Changes in the Utilization of Our Land Resources

The consequence of introducing an agricultural system, of the actual productivity of the agricultural land resources, of ecological conditions, and of the requirements of the national economy is the existing structure of agricultural land use shown in Table 2.

A significant role is played in this sector by all organizations responsible for the conservation of our agricultural land resources (the ONV [district national committees], KNV [regional national committees], and the MZVz [Ministry of Agricultural and Food]), which, in close collaboration and with the active participation of the federal agencies in charge of the economic management of agriculture and of socialist agricultural organizations, should consistently put into practice new measures, defined more precisely, and should never fall under the influence of local interests.

The basic goal of saving our agricultural land, as regards total area, is to assure that we will have the necessary acreage sown to every crop including the basic fodder crops, and, under the proper natural conditions, the required areas of truck farms, vineyards, and hop gardens.

The CSR has on file 92,879 hectares of temporarily uncultivated agricultural land, of which 9,127 hectares are arable land. There are 14,767 hectares temporarily unavailable for agricultural production (mining, construction), of which 10,973 hectares is arable land. These are our most significant land reserves. The criteria for reclassifying agricultural as nonagricultural land (wooded lands, other areas) and arable land as meadow or pasture land were set by Proclamation No 142/1976.

In view of the need for a concentration of truck farms, vineyards and pastures, we must, under favorable conditions and after carrying out the necessary modifications and fertilizing, utilize both scattered parcels of land and lower quality land. What is involved here is a component of so-called green investments, which will in the future be subsidized through the Federal Fund for Land Reclamation, of course, only to the extent of its financial capabilities.

Of significance in the rational utilization of the land resources is the consolidation of plots. This is done primarily by overall plot adjustments and involves the recording of land by enterprises, land which particularly becomes part of their agricultural economic maps. It makes use also of the results of a comprehensive investigation of agricultural lands. Also of significance in contributing to a future increase in productivity of permanent grass crops is the creation of pasture areas. Improved evaluation and utilization of agricultural land will be assisted by the new system of soil evaluation, for which basic maps for the entire territory of the CSR should be printed by the end of 1983.

On 18 August 1981, on the instruction of the ministries of agriculture and food of the CSSR, CSR, and SSR, it was stressed that we needed to provide for utilizing all sorts of land and a procedure was established for transferring plots of land unsuitable for use by socialist agricultural organizations to concerned public organizations, etc. In the CSR, 9,200 hectares had been transferred as of 30 September 1982.

There is a particular need for mountain and light equipment for soil cultivation and the harvesting of perennial grass crops, the development of which has been invested in by the CSSR Government.

Major Innovations, of a Noncapital-Investment and a Capital-Investment Nature, for the Enrichment and Better Utilization of Our Land Resources

In first place we should mention innovations in the area of soil reclamation. These involve primarily improving the quality of the soil structure and increasing the content of organic matter. The amount of our secondarily compacted land with unfavorable properties has been estimated at over 1 million hectares. One of the most effective measures is deep plowing of the soil. But we also need efficient agrotechnology, an increase in the amount of organic matter in the soil and other measures. One limiting factor is unfavorable soil acidity. In the CSR, we must improve 1.5 million hectares of agricultural land (of which 1.06 million hectares is arable) by the addition of lime. (A pH of 5 or less was noted in the CSR for 25.9 percent of permanent grass crops and 13.5 percent of arable land.) Innovations of a capital investment nature aimed at soil improvement concern primarily the sector of drainage and irrigation.

In draining soils we will make increased use of sporadic drainage and special drainage of units and objects, instead of area drainage. Furthermore, we will introduce regulatory units which will make possible reversible drainage (drainage and irrigation). Approximately 10 percent of draining operations will not involve excavation, and 40 percent will involve the use of special types of machinery. Of constantly increasing importance are necessary changes in the courses of rivers and streams and the reconstruction of soil reclamation systems (simple innovations).

Further construction of irrigation systems must be followed by their utilization (during the Sixth 5-Year Plan there was 48-86 percent [utilization] in systems with large areas). In 1980, 7,500 strip irrigators were in use in

the CSR. In addition to introducing technically improved equipment and the development of services, another task is the construction of reservoirs, including those of smaller capacity, to obtain irrigation water for special crops. In choosing their locations, we should look for variants which do not occupy high-quality land. There are still reserves in the sector of management of the irrigation regime, where a scientifically based and operational approach is, of course, of ever greater urgency in expanding our irrigation system.

The most striking direction of innovations is the modernization of soil-reclamation methods, which should include in particular the installation of new elements in drainage systems. Of investments in improvement of the land resources, we must not forget, in particular, recultivation and anti-erosion land conservation.

Our hitherto successful approach in the sector of noncapital-investment land reclamation measures will in future depend on our possibilities for obtaining financial support for this work, since the funds in the State Fund for Land Reclamation have decreased significantly in 1982 and 1983.

Table 3. Descriptive Need for Draining and Irrigation in the CSR [Thousands of Hectares]

<u>Need</u>	<u>Potential</u>	<u>Realized by 1980</u>	<u>Lacking</u>	<u>Anticipated in the Seventh 5-Year Plan</u>
Drainage	1,450	960	490	130
Irrigation	480	120	360	30

Table 4. Need for Land Reclamation Measures in the CSR as of 1 January 1981 [Thousands of Hectares]

<u>Recultivation of TTP [perma- nent grass stands] land</u>	<u>Recultivation of temporarily uncultivated land</u>	<u>Reclamation of extremely granular soils</u>	<u>Antierosion<sup>1</sup> conservation</u>
240	85	491	479

<sup>1</sup>moderately or greatly threatened land

#### Relationship of Innovations to Environment

Our agricultural land is an important component of our natural environment. After all, it occupies 55 percent of the territory of the CSR. Professionally designed and executed innovative measures in managing our agricultural land resources are directed at optimizing the amounts of air and water in the soil and the circulation of organic matter, and this may make a positive contribution to the creation and conservation of the living environment and to increasing the energy potential of the ecosystem.

The creation and conservation of the countryside and of the environment are, from the viewpoint of an idea of further development of agricultural production in the CSR, unthinkable without respect for the significance to the national economy of our agricultural land resources, primarily as regards increasing their productive potential, which, among other things, will be proportional to the degree of their conservation and rational utilization. All interference with our agricultural land resources should completely respect the principles of an approach based on overall land modifications. In 1981, the Research Institute for Agricultural Land Reclamation of Prague wrote a report on the "Reclamation and Conservation of Agricultural Land Resources in the Structure of the Natural and Human Environment to the Year 2000." This attests to the fact that due attention is being paid to these serious problems in our plans.

But the present shortcomings in land management and modifications have been unfavorable not only for the actual productivity of the land but have negatively affected primarily water resources and biocenosis and could prove damaging in general to our countryside.

In implementing measures aimed at intensifying the utilization of our agricultural land resources we should, therefore, take particular care to:

- respect current regulations concerning such activity in our countryside;
- maintain the principles of antierosion agricultural technology and take care of structural soil and soil with sufficient humus content;
- make sensitive determinations of terrain interference in the countryside;
- in consolidating plots and in draining, act with a view toward limiting criteria specified by the smoothness of the terrain, type of ground cover, etc.

9832

CSO: 2400/264

TRANSPORTATION MINISTER OUTLINES FUTURE PROGRAM

Prague DOPRAVA in Czech No 1, 1983 pp 2-4

[Article by Eng Vladimir Blazek, CSSR Minister of Transportation:  
"Transportation Deals With Weighty Problems"]

[Text] Five years have already elapsed from the promulgation of the principles for state transportation policy approved by the CSSR Government in its Resolution No 215 from 1977. The Czechoslovak transportation system came up during that time with a favorable balance for the Sixth 5-Year Plan and individual transportation sectors undertook implementation of new tasks for the Seventh 5-Year Plan, under much more difficult conditions than ever before. Namely, today and in the coming years we must implement throughout our transportation system and, specifically, within our ministry's jurisdiction an extraordinarily systematic implementation of the program of the party's economic policy oriented toward high efficiency and quality of operations in transportation. If we also add to these key tasks the program for intensification and a number of other tasks, we can see with extreme clarity the demands that are put on all of our managerial personnel. Consideration must also be given to the current situation, where our efforts are constantly affected and negatively impacted, as is all of our transportation, by the consequences of crisis phenomena in the capitalist economy.

From the above it follows that particularly today we must implement with more emphasis and insistence than ever before the basic orientation, mission and objective of the present and future transport policy in our country. Simply and briefly, all of us must strive primarily to create through effective measures the conditions for optimum division of transport operations and, thus, to meet societal transport needs.

The criteria for this division of transport operations in freight transport have actually been known since the early sixties and remain essentially valid in their full extent. They also serve as the basis for formulating the tasks and functions of individual branches of transportation in the framework of our transport system. Even today apply the principles calling for strict coordination of transportation activities which, if complied with, will promote the goals for continued development of transportation. Let us attempt to briefly characterize what the goals for the coming years will involve.

First of all, it will be necessary to:

- provide maximum support to development of railroad and water transportation;
- give priority to development of public highway transportation ahead of intra- and interplant transportation;
- give priority to development of electric traction in railroad and urban mass transportation;
- create conditions for efficient control of individual automotive transport, primarily by improving the quality of mass transportation.

We consider implementation of these goals to be a long-term task which within the envisioned development of transportation will call for, e.g., a more accelerated and more intensive approach to electrification of railroad lines, reconstruction and modernization of key railroad junctions and marshaling yards and, with a view to the future, we must also take under consideration doubling the tracks on some diversion routes and gradual construction of a third track along the most heavily traveled key tractions.

In water transportation, the key tasks should involve prolongation of the navigability of some streams and construction of ports or transloading facilities. To that end, the CSSR Government and the Presidium of CPCZ Central Committee approved a document dealing with continued development of water routes.

In construction of overland communications, we shall continue--even though with lesser dynamism than has been the case--to develop the highway network and modernize at the same time the existing basic network of highways and urban communications.

In urban mass transportation, the projects of main concern will remain continued expansion of the subway in Prague, beginning construction of an expressway in Bratislava as well as expansion of streetcar and trolley lines at the expense of bus transportation.

There is a need to realize that implementation of these key objectives, while very demanding on investments, instead of solving the basic causes of bottlenecks in the transportation system will merely touch upon their consequences. All analyses made to date point out unequivocally that the key reason for difficulties in transportation continues to be constituted by excessively high demands on transportation. This problem is comparable to, e.g., the high demand of the national economy on energy or materials, which also must be dealt with by society as a whole and by all governmental agencies. Thus, the basic solution is tied to overall intensification in development of the national economy and constitutes a long-term task.

Nevertheless, we do know of many measures that can be expediently implemented and it is on them that we will have to focus most of our attention. A set of these measures is contained in the government-approved principles for the state transportation policy. I have in mind primarily the instruments of direct and indirect control, be it in the area of planning, use of price or tariff policy, or financial

economic instruments, but also utilization of socioeconomic data, etc. However, they also involve other measures, primarily in such areas as e.g., replenishment of long-term assets, utilization of viable transportation systems, development of transportation in industrial and municipal conurbations as well as in agriculture. This also involves improved efficiency of supply and demand relations, management and organization of labor and, as of late, also increased attention in the area of modification of legal relations. One of the follow-up--but long term--tasks is preparation of a law regulating transportation.

The transportation sector is currently engaged in carrying out important tasks in the area of economy measures and implementing state goal-oriented programs.

All improvement efforts in the current year were oriented primarily toward making better use of available capacities for research and development, but also toward more efficient utilization of all material and energy sources and a more economical utilization of manpower. Promotion of efficient management and administration, to include effective use of computer technology is also oriented in this direction.

The means for research and development even in the remaining years of the Seventh 5-Year Plan will have to remain concentrated on problems regarding the condition of railroad lines and improved quality of passenger transportation, but also on making use of new diagnostic methods and instrumentation in operational maintenance of rolling stock and on more extensive utilization of electronics and microelectronics--particularly in the area of railroad safety systems. In the foreground of attention in civil aviation is the area of automated air traffic control systems whose accelerated implementation will bring about improved safety of air transportation and significant savings in aviation fuels.

The plan for development of science and technology in the remaining part of the Seventh 5-Year Plan is heavily counting on tasks which will produce the highest possible effects in the immediate future.

On the basis of the results obtained through economic research, we must orient our efforts in the current 5-year plan toward comprehensive restructuring of tariffs in all sectors of transportation and, on the basis of a detailed analysis of the current state of affairs, prepare introduction of a new comprehensive model of management in the public transportation branch.

All this, of course, is but a part of the many tasks that will have to be solved in the immediate future while also providing for the buildup of an information system for management of railroad traffic and utilizing industrial robots and handling equipment in railroad-oriented industrial maintenance and repair. Dealing with technological integration of river navigation vessels within CEMA will start in the coming years as part of international scientific and technical cooperation designed to enable us to establish as early as 1986 a transportation system on the Elbe River not calling for transloading and introduce a uniform traffic control system for river navigation on the Danube.

Capital construction projects will be implemented with substantially lower allocations.

Railroad transportation will see continued electrification of lines and construction of an automatic electric block system. Approximately 34 km of electrified lines were added in 1982, so that more than 300 km remain to be put into operation in the years 1983-85.

The automatic block system reached in the 2 years of the current 5-year plan a length of 87 km. The task remaining for the period 1983-85 is not quite 300 km.

Work will continue on all projects under construction, be it our repair and maintenance base, or construction of the transit station between the CSSR and the USSR in Velke Kapusany and the transit stations in Decin and Prostredni Zleb. We must further provide for establishing a fuel and energy base in the North Bohemian region and reconstruction of railroad stations in Kralupy nad Vltavou, Poprad-Tatry and Presov. A considerable part of the investment construction will once again go to the social services program.

In the sphere of water transportation, we shall continue with the construction of a Danube port in Bratislava and other projects under construction. It is envisioned that the central service and repair center in Chvaletice will be completed. It is also planned to supply additional cargo vessels and harbor cranes.

In the air transportation sector, we envision completion of the construction of a hangar for Slov-air at the Bratislava airport and several projects in the remaining construction categories.

In the area of manpower, we set up for the period of the Seventh 5-Year Plan meeting the planned work schedule throughout the transportation sector as the basic objective.

Toward the same end are oriented all measures in the area of social policy within our jurisdiction. This involves primarily creation of favorable working and living conditions, particularly for operational personnel, but also continued expansion and improved quality of meals in plant mess halls, intensified health care, expansion of capacities in the sectorial preschool care installations, etc.

In the course of the Seventh 5-Year Plan, we intend to provide boarding for an average of 55 percent of workers in the transportation sector. Personnel in continuous operations will continue to receive free board, including at night, on Saturdays, Sundays and on state-sanctioned holidays.

Dealing with housing problems must also continue to belong among the key factors for recruitment and stabilization of manpower. Particular attention will be paid to dealing with the housing needs of personnel in younger age groups starting a family and to personnel in hard-to-fill jobs.



In the context of the resolutions of the Presidium of the CSSR Federal Government No 22/1982 and of the CSSR Government No 26/2982, the Federal Ministry of Transportation worked out a proposal for utilization of extraordinary wage resources made available by the federal government. The overall sum for 1982 was Kcs 122 million and, because some measures in support of continuous operations did not become valid until April 1982, an additional allocation is envisioned for 1983 in an amount of Kcs 24 million. The extraordinary allocated resources are used by the transportation sector primarily to provide support for supplementary operations with irregular starting times in the form of a fixed hourly premium.

If we say that in the future railroad transportation will retain its leading position in our transportation system, it also applies fully to its decisive share in transport output for exports, imports and transit, as well as in international transportation of passengers. Railroad transportation will keep growing in importance not only because of its relatively low demands on energy, but also in connection with the constantly deepening international cooperation and specialization.

For that reason, it is envisioned to increase the capacity of main tractions among CEMA member countries and it will also be necessary to accelerate dispatching of shipments at border stations and improve the organization of train forming. Substantial improvements in the quality of travel and offering services for passengers must be applied particularly in international passenger traffic. Measures for improving the operations of a common pool of freight cars and management of foreign rolling stock in the CSP [Czechoslovak State Railroads] network in general are now under preparation.

Development of international transportation must be matched, with a view to economy measures in the consumption of fuels, also by development of international public automotive transportation, particularly where it could help achieve--in comparison with other types of transportation--significant foreign-exchange savings and, in view of its speed, also other favorable effects.

Low demands on energy and foreign-exchange advantages also clearly point in favor of securing a continuous increase in the share of water transportation, particularly in overall transportation of Czechoslovak foreign-trade products. However, that will also call for further deepening and organization of cooperation with partners to achieve maximum utilization of existing and new capacities, and for transferring additional Czechoslovak goods to the Elbe and Danube rivers from the parallel railroad lines and highways.

A specific position will accrue to air transportation which--according to the adopted measures--will be oriented primarily toward development of international air routes. It is envisioned that its share in the total output of Czechoslovak passenger aviation will keep increasing with significant reduction of intrastate lines and airports. The economic

significance of Czechoslovak civil air transport is constituted today primarily by providing air transportation for passengers, mail and cargo under conditions offering us more foreign-exchange advantages than if we availed ourselves of the services of foreign carriers.

We shall continue to place main emphasis on maximum utilization of the existing network of the CSA [Czechoslovak State Airlines] and expansion of joint operations on individual international air routes, not only among CEMA countries, but also to third countries.

8204

CSO: 2400/267

TRANSPORTATION MANAGEMENT OBJECTIVES FOR 1980'S OUTLINED

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[Article by Prof Dr Werner Gross, Prof Dr Hermann Wagener, both economists of Friedrich List College for Transportation Management, Dresden; and Hanns Mauthner, engineer, group director for GDR Transportation Minister's Scientific Management: "The Socialist Transportation System of the GDR--Result of the Creative Application of Karl Marx's Teachings"]

[Text] The first part of this article contains--proceeding on the basis of some aspects of the theory-constructive role of Marxist pronouncements regarding transportation in a real socialist society--fundamental observations regarding the significance of relocation insofar as it relates to the development of the forces of production and to society. There are also fundamental observations about the proper social role of relocation and about the function of goods transport and of personal transportation together with comments on transportation as an autonomous sphere within material production.

In the second part of the article basic conclusions are reached regarding the effectual conversion of the economic strategy of the SED for the eighties within the area of transportation, with the focus of attention being upon the provision for the population and the economy of socially necessary transportation which is reliable, safe and of good quality, while at the same time accomplishing this with a minimum of cost in terms of living and objectified labor.

The basic insights of the doctrine of class struggle and of industrial reproduction as elaborated and established by Karl Marx and Friedrich Engels under conditions typical of the modus operandi of capitalist production continue today in their basic pronouncements to possess their full validity and hence contemporary relevance in the struggle with imperialism for the preservation of peace and for the building of socialism/communism.

In the domain of political economy this concerns primarily the connection between simple and augmented industrial reproduction, the establishment of a proportion between social gross product and national income, the division of social production into production of the means of production and into the production of consumer goods. This subject also bears upon the process of setting up requisite ratios between the various parts of the social gross product.

In capitalist society industrial reproduction in the interest of the owners of the means of production serves exclusively to achieve maximum profit with all those social consequences which are now becoming evident in the capitalist countries today to an extent never before observed since the great depression in the beginning of the thirties of this century.

On the other hand in socialism industrial reproduction serves the continuously improving satisfaction of the growing needs of the total society. This goal setting is brought to realization

- i. by the further elaboration of intensively expanded industrial reproduction,
- ii. by giving first place to the reproduction of the means of production, and in particular to reproduction of the instrumentalities of labor,
- iii. by a high industrial reproduction tempo in the conscious development and furtherance of subjective developmental factors, especially of the primary productive power, namely human labor,
- iv. by close bonding between material industrial reproduction with the augmented reproduction of the conditions of production, primarily through specialization, cooperation and combination of production in the national and international domain.

In the theses of the Central Committee of the SED on the occasion of the Karl Marx Year 1983 special emphasis is given to the contemporary relevance of Marxist ideas in the struggle for peace and for social progress and for the further building of real socialism.<sup>1</sup>

On Some Aspects of the Theory-Constructive Role of Marxist Pronouncements Regarding Transportation in a Real Socialist Society

After more than 30 years of successful development of the German Democratic Republic the Socialist Unity Party of Germany has described its experience and acquired knowledge in the "Theses of the Central Committee of the SED on the Occasion of the Karl Marx Year 1983."

Thereby the party of the working class initiates a discussion of its contribution to the further development of the theory of Marxism-Leninism. In Section IV of the Theses it is demonstrated that only real socialism is capable of solving the fundamental problems of humanity. The characteristic features of this process are described in Thesis 23. These features include the principle of the unity of economic and social policy, the transition to an intensively

expanded type of industrial reproduction, the organic bonding of the achievements of the scientific-technological revolution with the advantages of socialist society and also include a high level of social activity, a fully developed collectivity and an increasing role of the party in leadership.

Implied and appropriate basic orientations are also applicable to transportation with regard to its national economic and social industrial-reproduction function. To this end the authors offer this discussion of current questions relating to the application of Marxist insights to relocation and they also offer some generalization acquired from the experience of the GDR in building up the socialist transport system.

In several places in his Complete Works, especially in "Capital," "Theories of Surplus Value," "Critique of Political Economy, and "The German Ideology" Marx has made basic pronouncements regarding transportation and in a real sense also regarding relocation.

One finds in the works of Marx two objectively founded different but closely related ways of thinking. On the one hand there is the point of view of the function of transportation in the total social industrial-reproduction process (functional point of view), and on the other hand there is the viewpoint of internal reproduction of transport as an autonomous domain of material production and the viewpoint of its contribution to the national income (institutional point of view). These in turn are usually not in the first instance derived from an analysis of relocation processes but are a constituent of his technique of investigating production and the conditions of production. Therefore it is possible only with difficulty to make a definitive and comprehensive statement of his remarks as they are formulated in several places on various premises. Undoubtedly, Rehbein in his book "Transportation and Communications in the Works of Marx, Engels and Lenin" has provided a very useful study in this connection.<sup>2</sup>

Also advanced school textbooks in recent years have responded to a desire to use the pronouncements of Marx ever more comprehensively as the theoretical basis for the development of the socialist transportation system in the GDR.<sup>3</sup> A number of related periodical publications, in particular in the columns of this periodical, have made it possible to enrich the discussion of the role of transportation in the national economic industrial-reproduction process.

On the Importance of Relocation in the Development of the Forces of Production and of Society

The position of relocation in the social industrial-reproduction process has been described by Marx consistently with the observation that the metabolism of social work determines a corresponding shift in location of the products.<sup>4</sup>

By showing that the transport process is also a function process within the sphere of circulation<sup>5</sup> the process of relocation is extended to a broader domain. According to Marx, relocation is thus in addition to production, circulation, distribution and consumption of material goods a constituent of the reproduction process.<sup>6</sup> Under this same heading there is also his pronouncement

regarding the effect of the duration of the transport process upon the length of the cycle time of products. The concentration of production joined with a concentration of markets results in a broadening of the field of capitalistic production. The development of the transport industry eliminates local distances to the market and leads to a concentration of production. Servicing of distant markets becomes possible with the development of means of transportation.<sup>7</sup> Transport requires a "transport industry as a special variety of industrial capital" which becomes necessary in consequence of the social division of labor.<sup>8</sup> Thus the growth of capital in the fourth sphere of material production becomes a general phenomenon.<sup>9</sup>

#### On the Appropriate Social Role of Relocation

Marx has demonstrated that relocation is an additional production process of the transport industry.<sup>10</sup> The pronouncement that "the transport process is the production process of the transport industry"<sup>11</sup> has made this proposition more precise. With regard to the product of relocation it can be inferred from the Marxist account that

- i. it does not exist in an objectified form,
- ii. it is amenable to substitution only within limits,
- iii. that its manifestations in production and consumption coincide with respect to place and time,
- iv. that it is not capable of being stored and
- v. that it cannot produce more value than it itself possesses.<sup>12</sup>

The preceding discussion makes it apparent that transport work is productive social work and that its work productivity affects the ratio between cost and utility of the social reproduction process. In this connection Marx observes that the smaller the quantity of work for the given distance the greater the productivity.<sup>13</sup> This implies that for the further development of the socialist transport system there exists the urgent need to meet the socially requisite demand for transportation in an ever more effective manner.

Over and above this Marx has expressed himself regarding many other problems. These include inter alia the reproduction of basic capital in the field of transport, value growth, value depreciation, value consumption and the infrastructural function of the transport system. In summary Marx may be credited with an important achievement in recognizing relocation (... transport) as a constituent of objective material conditions, in other words of the conditions of production. Relocation has social character because it makes possible the cooperative efforts of men and with its aid their activities and the results of their activities may be exchanged.

Relocation as a whole is an integrated constituent of all political economic and social processes of society; it enters both into the productive and also into the nonproductive sphere and makes possible mobility (relocation of

persons and goods) as well as the dissemination, the exchange and the acquisition of socially and individually important knowledge, experience and regulation. Relocation is the totality of forms in which persons, goods and information are moved in space. In its manifestation as material traffic--as a process of labor-related material production directed toward relocation--it functions as a social productive force. Thus relocation has a social reproductive function, serves to satisfy the basic need for an existence involving relocation and has an elemental effect as a physical precondition of reproduction in the further development of the conditions of production. The basic phenomenal forms of relocation are

- i. the relocation of persons,
- ii. the relocation of goods,
- iii. the relocation of information.

Relocation affects the unfolding of all social processes of society, of the standard of living, of the conditions of labor and living, of the mode of living as well as the relations between nations.<sup>14</sup> Thus the total social character of relocation corresponds to the requirements of the general laws of movement and structure, to the

- i. Law of the Consonance of the Conditions of Production With the Character of the Productive Forces and to the
- ii. Law of the Determinative Role of the Social Economic Base Relative to the Ideological Superstructure.

An evaluation of the results and experience obtained in the development of relocation capability in the GDR on the scale of the state as a constituent of the maturing socialist production conditions leads to certain initial generalizations regarding the ratio between the development of the social total product and the development of goods transport capability (total). This judgment is supported by comprehensive statistical investigations and their overall results within the context of sociological research.<sup>15</sup>

Depending upon the level and type of overall social reproduction the ratio between the development of the social total product and goods transport capability is subject to changes taking place in time. With reference to the GDR one may discern the following three stages:

The first stage is the absorption of essential portions of the transport system (railway) into socialist possession and the further step-by-step building of socialist property forms in the other branches of transportation. At this stage the development of goods transport capability took place more rapidly than did the social total product--bearing in mind that the per capita ratio of the social total product is still relatively low. National economic reproduction then begins to unfold increasingly on the scale of the state and in sequel to this the still relatively low goods transport performance increases rapidly. As the completion of the transition period from capitalism to

socialism becomes more marked the growth rates of goods transport performance come to approximate the growth rates of the social total production.

The second stage is characterized by the fact that the tasks of the transition period have been essentially accomplished and a total social reproduction has been developed. The national economic ratios were at this stage established predominantly by extensive growth factors and resources. It is the stage of the creation of the foundations of socialism. The reproduction function of transport operates primarily under the aspect of the total state transport system. The associated employment of surplus production in the interest of accumulation gives rise to change to the extent that from now on the goods transport performance does indeed increase but more slowly than the social total product. This is an expression of the predominantly extensive character of the expanded reproduction of the national economy. At this stage the use of surplus production for the accumulation of transport equipment and facilities attains, as compared with the first stage, a higher share in the expended national income.

The third stage is the stage of the developed socialist society. At this stage the objective conditions change once more. From now on it is possible to utilize the extensively created expansion fully for the purpose of reproduction. It is the stage in which a transition takes place comprehensively to intensively expanded reproduction of the national economy. The proportion between social total product and goods transport performance corresponds now more and more to the basic principle of intensively expanded reproduction. The per capita ratio of the social total product continues to increase. The growth of the social total product from now on clearly exceeds the growth in goods transport performance. This once again is the result of the continuously growing level of production, of the higher quality level of the products, of better cooperative and exchange relations and of an effective transport production which is increasingly responsive to need.

#### The Function of Goods Transport

Regarding the function of transport in the social reproduction process Marx has given some basic indications primarily with respect to goods transport. Thus he writes, e.g., in "Capital":

"Within every production process relocation plays [a] great role. The transition of the finished product ... from one autonomous production shop to another which is at a distance from the first one displays the same phenomenon but at a higher level. The transport of the products from one production shop into another is followed by transport of the finished product from the sphere of production into the sphere of consumption. The product is not ready for consumption until this movement has been completed."<sup>16</sup>

Although transport "... /appears/ as the continuation of a production process within the circulation process and for the circulation process" (emphasis by the authors [in slantlines]), at the same time it remains a part of the production of those goods whose relocation it completes and whose production it thus terminates. According to Marx therefore the relocation of the product



belongs "... economically considered in the production process itself ..." and therefore Marx counts the cost requisite for it "... together with its manufacturing costs ..." <sup>17</sup> in the "... capital employed in the direct production process." <sup>18</sup>

From this there result under the conditions of socialist intensively expanded reproduction the following essential aspects of the matter:

a. Goods transport is one of the principal processes of material production without which no consumer value arises. The transport system must become ever more adapted to the increasing cooperative interrelationships of industry. At the same time there follows from this the unconditional necessity for fully meeting quantitatively and qualitatively the transport requirements imposed by an assured production.

b. The outlay for goods transport is economically a form of production-consumption of the other branches of the national economy. At the present time the national economy of the GDR expends about 14 billion marks for internal goods transport alone; this corresponds to about 4 percent of the production-consumption and about 7 percent of the net product of the productive branches of the economy. For the turnover in goods associated with transport there arises further about half of this sum as an additional expense. The lowering of the national economic transport outlay is, in the interest of a rapid increase in the national income, a constantly present problem bound up with any cost-conscious socialist economy. It has a logical place, as stated by the general secretary of the Central Committee of the SED Erich Honecker at the 10th Party Congress of the SED, "... in our national economic activity ... the total goods transport operation must be performed more effectively by the shortest route with less fuel and energy. We need rational transport turnover and storage processes." <sup>19</sup>

Thus the lowering of the cost of transport is elevated to the rank of a total social task which relates to all branches of the economy.

The principal routes toward the solution of this problem are:

i. analysis , optimization and new configuration of the mechanisms of supply and transport,

ii. strengthening of the influence of management with the aid of legal, economic and administrative measures and regulations,

iii. rationalization of transport, turnover and storage processes,

iv. more attention to transport cost within the context of structural and site planning.

Results thus far--achieved in particular through transport optimization and the use of transport planning parameters--are remarkable.

c. Transport cost enters into the goods production parameters of the production operations; reduction of the transport cost lowers the final commodities production figure. Thus the national economic planning with respect to this important performance parameter is not stimulated in proportion to the requirements of intensively expanded reproduction. Thus it appears desirable to normalize the specific transportation cost--just as the other elements of production-consumption--thus recognizing its social role, and it also appears desirable to establish normative relations between production and transport. This is in no sense a one-time procedure but is on the contrary a dynamic process which with regard to the interactions between production and transport requires continuous conscious control by optimizing subsequent phases and by means of economic regulations. If the share of transport in commodity production were determined by using the transport norm then to exceed the norm would have a negative effect upon industrial output and to fall below the norm would have a positive effect and it would be possible for the commodities production parameter to have a stimulating effect upon lowering of transport cost.

d. As one comes closer to the optimum it becomes progressively harder to lower the national economic transport cost by optimizing supply relations with the aid of the "classical transport model." Therefore for long-term work it is necessary to carry out the transition to production-transport optimizing and it is necessary to create a scientific sequence of operations and corresponding programs.

e. Transport gives rise not only to direct transport expense it also influences production indirectly through the commitment, dependent upon transport speed, of circulating funds for goods which are in transport. Here transport is "the principal means of shortening circulation time"<sup>20</sup> and hence the principal means toward the one-time and continuous liberation of circulating funds.<sup>21</sup> Transport, through the frequency, continuity and reliability of commodities supply, exercises an effect upon the extent and costs of warehousing.<sup>22</sup>

f. Functional examination of goods transport discloses a number of theoretical problems associated with intensively expanded reproduction; thus inter alia:

i. the problem of determining the socially necessary goods transport requirement and its normalization,

ii. the problem of the still inadequate responsiveness to national economic interests in the lowering of transport cost within the context of industrial cost accounting upon the basis of differentiated evaluation criteria and parameters in the combines and factories of industry.

#### The Function of Personal Transport

Primarily because of the lesser importance in his day and the almost total absence in his day of inner city transport one finds substantially fewer references by Marx to the position of personal transport within the social reproduction process.

On the other hand in the developed socialist society personal transport has an ever more markedly productive, consumptive and social function in the accomplishment of the primary task decreed by the party.

In several places Marx points out both the essential equality of goods traffic and personal traffic, "... whether it [the locomotive industry] transports men or commodities,"<sup>23</sup> and also the differences between them, in accordance with which personal transport appears only as a service<sup>24</sup> and the product which consists of personal transport is consumed not productively but individually and its value vanishes with this consumption.<sup>25</sup>

Thence arises the obligation based both upon the complete works of Marx, the works of Engels and Lenin, previous experience in socialist construction in the GDR and other brother countries and also upon the decrees of the party, to fortify our contribution to a Marxist-Leninist economic theory of personal transport in the developed socialist society. In the following paragraphs some starting points to this end will be listed:

a. In personal transport there is a distinction between relocation in order to preserve the daily life functions of men (that is, in principle, inner city transport) and relocation in order to secure long-term reproduction of the labor force (that is, in principle personal long-distance transport). At the same time another line of distinction runs so to speak across the above-mentioned classification if one subdivides personal transport according as it directly strengthens production or serves to satisfy consumer needs. The distinctions are objective; they are subject to differentiated goal-functions and evaluation criteria.

b. Just for personal transport using public transportation facilities our society has expended more than 7 billion marks per year of which 40 percent was in the form of expenditures by the population and almost 60 percent consisted of expenditures out of the state budget. This creates also for personal transport the problem of rationally organizing it in accordance with social requirements and possibilities.

c. Occupational transport is in its very nature just as integrated a part of production as the transport of goods. Its costs belong--regardless of who first defrays them--to the manufacturing costs of material goods; they enter objectively into value transfer and value formation as product-consumption in the other branches of industry.

d. In personal transport for the purpose of securing long-term life functions the income development of the population is an essential factor--in contrast to the case of inner city transport. Marx remarked so to speak on the negative aspect of this:

"If I have no money for traveling then I have no need to travel, that is, I do not have any real and objective need to travel."<sup>26</sup>

As a positive converse to this remark there arises as a consequence of the income growth in socialist society the tendency for personal transport demand to

grow continuously; but this suggests also the possibility of planning personal transport on the basis of income development.

e. For travelers an expenditure of time is bound up with personal transport and this expenditure has essential importance. Under our conditions our citizens spend annually substantially more than the work time of a month in transportation facilities.

This latter time has the effect of subtracting from free time. Its shortening would thus have the same effect as a shortening of work time. This at the same time also yields a lowering of so-called "transport fatigue." The free time gained has an effect "upon the full development of the individual and this in turn as the greatest form of productive power has an effect upon the productive power of labor."<sup>27</sup>

#### Transportation as an Autonomous Sphere Within Material Production

Marx characterized transportation as an autonomous fourth sphere within material production which has arisen as the result of the social division of labor,<sup>28</sup> that is, as a "special equipment sphere of productive capital."<sup>29</sup> Within this there arose through "internal subdivision of labor" the various branches of transport. The law of cooperation and concentration enunciated by Marx applied both to transportation as a whole and also to the individual branches of transportation--just as the law was also applicable to the total material production. It was on this that Marx based the objective tendency toward socialization, the tendency toward the concentration of large transport operations and the development of transport systems. In consequence of the emergence of relatively cheap means of transportation and the maintenance of transport routes by the state there took place, however, at the same time an oppositely directed process of "individualization" of transport in factory transportation and in private automobile transportation; the inventory of vehicles in the latter category exceeds that of transport in the autonomous production branch. From this one obtains the following data and consequences for transport in the developed socialist society in the GDR:

a. The principal advantage of the socialist transportation system consists in the fact that in the case of primary national economic interests the individual branches of transport develop in accordance with their technological-economic practical domains of utility as parts of the uniform transport system--and in this development even range beyond the national limits.

The evolution of territorial and national transport systems as well as of transport systems of the member countries of the Warsaw Pact is a decisive part of the process of socialist socialization of production.

b. Great importance for the role of the different branches of transportation within the transportation system attaches to the division of labor between them; on the basis of this division the different branches of transportation are oriented toward those transport tasks which they are best adapted to under existing national economic conditions. It is in accordance with this that under the present developmental conditions in the GDR appropriate forms of

transportation have been displaced from the road to the railway and to inland navigation.

c. The further socialization of transport requires that the transport system be further developed by an increasingly better division of labor accompanied by a complete inclusion of transport to and from work. This requires overcoming the fragmentation of transport capacities and transport performance in work traffic, reduction of the number of small organizations engaged in work traffic and especially requires the further socialization of these capacities by rationally combining them into territorially oriented large-scale transport unions under the management of a public vehicular traffic agency.

d. In the domain of personal traffic individual transport will continue to increase. The process of socialization and system development will take place primarily through the further combination of the capacities of public transport--e.g., the subdivision of the urban local traffic into the VEB transport combines--and also through the development of specialized transport services and traffic organization measures designed to have some influence upon private automobile transport. One may expect that through these measures there shall be attained a synthesis of individual transport with the development of public transport, this synthesis being oriented toward the interests of socialist society. By this route the social and cultural function of the cities will not only be maintained but will be further enhanced in the interest of all citizens.

As an autonomous sphere of material production, transportation participates in the creation of the social total product and the national income. Transportation is a very capital-intensive branch of the national economy involving a high proportion of capital which is independent of output; its results grow--not least of all as a result of measures aimed at lowering the cost of transport--in general more slowly than the production of objectified goods. In order to preserve its function the national income must be redistributed. In consequence of the further lowering of the national economic transport outlay, of the high proportion of capital which is independent of output and in consequence of the live labor required for the functional competence of transportation the following statements may be made regarding the future percentile role of transportation:

- i. there will be different reductions in its percentage share in the national income and in the social total product;
- ii. its share in investments will remain about the same;
- iii. with respect to labor forces and labor wages it will display a tendency to increase.

From this there follows:

- i. the tendencies mentioned can "intensify" if there is an increase in the quality level of production, if there is a further reduction in the demand for transportation and if there is an optimizing of transportation. Then this

development is in the national economic interest if in consequence the total cost of transport and production is reduced;

ii. further important reserves may be opened up toward enhancing the contribution of the transportation system to the national income and the social total product especially through higher utilization of transport capacities, e.g., accelerated circulation, full utilization of transport capacity and of operating time, and also through increased productivity of labor;

iii. transportation can be evaluated through the net product and gross product parameters only under certain conditions. These parameters must be either replaced by or supplemented by further criteria such as

a) e.g., assurance of the socially necessary transport demand for quality and quantity which underlies the plan,

b) specific primary costs per transport performance unit,

c) specific energy requirement per transport performance unit.

In these terms it is necessary to perfect the system of economic accounting of transport operations.

#### **Demands Imposed Upon Transportation in the Eighties**

"With the economic strategy for the eighties decreed by the 10th party congress," in the words of the Theses of the Central Committee of the SED for the Karl Marx Year 1983, "the SED possesses a comprehensive design for the transition to intensively expanded industrial reproduction in the national economy. It is based typically upon fundamental theoretical insights which were first formulated by Karl Marx, especially in his principal work 'Capital,' and represents a creative application of Marxist-Leninist reproduction theory under the concrete conditions of the GDR."<sup>30</sup>

The purposeful and imaginative conversion of this economic strategy of the SED for the eighties is thus also at the center of the total transportation effort of the GDR. Essentially it is a question of providing socially necessary transport performance for the population and for the national economy reliably, safely and with good quality but at the same time also at least expense in live and objectified labor.

The following basic tasks are implied by the high demands for efficiency in transportation and turnover:

1. It is a question of establishing the economically requisite extent of transport performance in goods transport required to guarantee the industrial reproduction process and to meet the foreign trade obligations of the GDR. In so doing it is necessary in principle to exclude transport which is not required and to optimize required transport relative to the supply relationships which occasion it and relative to the transport route. The problem of optimization exists also for administrators of public personal transport lines,

especially in the cities and in congested areas and also with regard to the frequency of their service, in order in this way to assure transportation which is in accord with social requirements.

2. Rational exploitation of the advantages of socialist conditions of production requires a deepening of the optimization of the division of labor in terms of cost and especially in terms of energy between the carriers. The economically effective performance of the particular transport service concern is here the decisive criterion. Upon this basis and with respect to the employment of capital and the development of the efficiency of transportation there should be a planned guarantee both of the requisite proportion relative to the total social development (especially relative to the national economy of the GDR) and also a guarantee of the requisite proportionalities between the different carriers.

3. The transition to an intensively expanded industrial reproduction is an indispensable prerequisite to higher efficiency of transport. In this sense with the aid of rationalization in branches and in territorial divisions all technical, technological and organizational possibilities should be fully exhausted by the carriers themselves with a view to assuring completion of the tasks assigned to them within the context of division of labor while at the same time decisively improving the ratio of cost to utility. The optimal configuration and guidance of all phases of the transport process must primarily serve the purpose of permitting locally attainable and locally occurring effects to become effectual as quickly as possible as a total effect of the transportation process.

For the conversion of the economic strategy of the SED for the eighties in transportation these fundamental tasks become more and more an objective necessity. The fact that the necessity of these tasks first requires recognition, intellectual penetration and understanding before these tasks can be creatively carried out in practice is a circumstance which corresponds to the dialectic scene by Marx between "objective and subjective momenta" in the work process.<sup>31</sup> Thus seen the concrete application of the economic strategy of the SED for the eighties in transportation is a most profoundly creative process. We also find important answers in this connection in the works of Marx who saw the primary productive force in the capacity of men for work but who nevertheless did not by any means limit this to physical activity but understood it to include the totality of physical and intellectual capacities.<sup>32</sup>

The configuration of the developed socialist society in the GDR permits and brings about the intensified expression of and the application of intellectual productive forces to an equal extent. Marx understood this above all to consist of the goal setting, constructive and ever more insightful work of human consciousness but he also understood it to include application of accumulated knowledge in the process of production itself.<sup>33</sup> It is here that one must seek first principles as long as we see as we do today the decisive source of steady economic growth in science and technology and as long as we strive for their higher effectiveness in the reproduction process and as long as we take as our goal the perfecting of administration, planning and economic accountability in order to achieve more effective control of increasing national and

international cooperation, specialization and combination of growing industrial reproduction. In this way the active role of the socialist edifice will be strengthened.

Here, too, we must include greater efforts toward a still better "agreement among social, collective and individual interests as a basic form of movement of the qualitatively new contradictions of socialism"<sup>34</sup> [sic] (as they are called in the Theses of the Central Committee of the SED on the occasion of the Karl Marx Year 1983) in order to exploit the resulting "higher social activity, collectivity and consciousness of the workers"<sup>35</sup> as a driving force of social progress.

### Transport Policy and Economic Strategy

At the start of the third year in the current 5-year plan an evaluation of the results and experience obtained in the last 2 years leads logically to the conclusion: the transport policy design for conversion of the economic strategy of the SED for the eighties has shown itself in practice to be correct. With the aid of this evaluation it has been possible to distinctly lower the national economic transport outlay, to introduce and gradually establish decisive changes for an energy-conserving division of labor between the different carriers and to substantially intensify the transportation process itself.

Thanks to comprehensive measures and great efforts in transportation itself as well as in all other areas of industrial reproduction with a view to lowering the national economic transport outlay in inland traffic it has been possible in the years 1981 and 1982 to lower the ratio of goods transportation to total social product by as much as 14 percent. This result corresponds approximately to the lowering of transportation cost which was realized in the 10 years from 1971 to 1980. A decisive share in this may be credited to optimization of supply and transport relationships which took the form of transport performance savings which rose from 410 million ton-kilometers in the year 1981 to about 3 billion ton-kilometers in the year 1982 so that within 1 year the saving increased more than sevenfold. To the noteworthy result during the past year the branch industries with their centrally managed combines and factories have contributed two-thirds and the district councils [Raete der Bezirke] with the locally managed combines and factories have contributed a third. On the average it was possible to reduce transportation activity with the aid of optimization in the centrally managed area of the economy of the GDR by 3 percent and in the locally managed domain by 7 percent. The primary optimizing of supply and transportation relationships must be considered terminated this year so that now there will be increased emphasis on solving the problem of optimizing cooperation and combination in production. Here there opens up a new field of activity for a further reduction in transportation outlay, in the course of which there shall be a deep intervention into existing production structures of our economy. Here relative to the general social interest the total effect is always decisive; from this it follows that the cost of production and transport must always be minimized together.

The central question in the design of a transportation policy, namely the problem of perceptibly lowering the cost of transport while preserving



required transportation performance of good quality, is also clearly reflected in the changing division of labor among carriers. An achieved reduction in transportation performance within inland traffic in the last 2 years by 5.3 percent was associated with a rise in performance by such energy-conservative carriers as railway and inland navigation together amounting to about 3.3 percent while road transport performance of public vehicular traffic and traffic to and from work were reduced by a total of 24 percent. This yields for the share of carriers in the total goods transport performance of inland transport in the case of the railway and inland navigation when the year 1982 is compared with the year 1980 an increase by 6.2 percentage points to a share of almost 76 percent. On the other hand in public vehicular transport and transport to and from work there has now been an analogous reduction to 24 percent. It is the aim of transportation-policy design to preserve and amplify this year and in the following years this cost-lowering effect resulting from changed distribution of transport performance among the carriers. At the same time it is intended that the share of inland transportation in goods traffic which is absorbed by the railway and by inland navigation should increase once again by almost 10 percent by the year 1985.

These changes in the performance structure naturally give rise to profound consequences for the further configuration of the goods transport system, for the development of the performance capability of the railway and of inland navigation as well as for the future capacity allocations of diminishing road transport. An important clue may be found in the fact that with the changes in labor distribution necessarily there is an increase in broken transportation, i.e., in turnover from one carrier to another. This calls for new studies and solutions with regard to effective cooperation of all participants as well as with regard to their legal economic and technological configuration. These measures must be supplemented by the expansion and specification of the most favorable location for access points to the railway network and to the inland navigation routes, also through giving primary importance to the development of combined transport in particular through expansion of large container transport, through the establishment of additional transport chains favoring turnover as well as through a rational organization and mechanization of work at the turnover points. New requirements also arise in the clearly multiplying piece-goods transport as well as in the transport of express shipping, which must also be fitted into the changed labor distribution system. In the past year there has begun the building of an inland delivery system within the framework of district-managed transport combines; for this purpose a form of organization was chosen which is intended to guarantee in the interest of transport customers as well as in the interest of the carriers rapid pickup, transshipment, transportation and distribution of small items.

#### Toward Intensively Expanded Industrial Reproduction

The task of "transporting more efficiently" demands consistently a transition to intensively expanded industrial reproduction as the determinative model for the development of productive forces and the production conditions adequate to these forces in the transport system of the GDR. Here there is a promising source for the economically necessary lowering of transport-related production-consumption, for decisive improvement of the relation between cost and result.

Now the problem is to direct toward and measure against this all-encompassing goal the entire breadth and variety of efforts and measures toward lowering the "cost of live work," for "reducing the consumption of energy sources and material," for "assuring higher efficiency of basic capital and investments" as well as for a "higher quality"<sup>36</sup> in the technological linking of all elements of the transportation process. It is of importance for this purpose to effectively combine the basic requirements of the rationalization of transport with the manifold possibilities of territorial rationalization and thus expand the theater of action for an effective utilization of productive forces; this can be done all the more successfully by utilizing all the advantages of the conditions of socialist production, in other words via the specific reproduction process of the branch, of the combine and of the factory. Experience and results of recent years confirm the possibility of achieving the highest utility by means of this consciously produced synthesis. Referred to the year 1981/82 this is proven by the saving of about 60 million worker-hours in the transportation system which corresponds to a labor capacity of 29,000 workers and to a lowering of the absolute energy consumption by 14 percent, diesel fuel consumption in particular being lowered by 13 percent. These results were achieved mainly through an intensified transition to electrical propulsion systems with the absolute focus of attention here being the accelerated route electrification of the railway; these results were also the consequence of considerable specific lowering of consumption as a result of technological measures and measures of coordination of the application of available resources. In this connection attention should also be drawn to the altogether greater utilization of the primary working equipment of transportation, especially of the freight cars and inland shipping; it was this more than anything else that made possible the achieved growth in performance within the context of the changes in labor distribution.

But the intensively expanded industrial reproduction implies not only the more rational utilization of the physical plant with the object of improving the ratio of transport-dependent production-consumption to actual transportation performance but it also requires above all the uniform planning of continuous maintenance and modernization. It is this requirement which motivates the intention of prolonging the useful life of the physical equipment as a function of the conditions of wear and reproduction and which also motivate the aim (through logical combination of general repairs and rational investments) of enhancing the availability of physical equipment, of maintaining presently existing substance and of improving performance development and efficiency development within the overall design of transportation policy. However, here one must keep in mind the premise that the effect attainable by prolonging the working capacity of the physical equipment must always be greater than the increasing cost of maintenance and general repair.

A logical route to pursue in the conversion of this design, oriented as it is toward physical plant, consists in the planned intensification of in-house performance on the part of the carriers for the renovation of worn parts and for the production of replacement parts, for the construction of facilities to increase efficiency and for the construction of new transportation facilities as well as in building production--all of this with the intention of unburdening important national economic balance sheets.

## The Role of Scientific-Technical Progress

For all these directions of labor which have been mentioned, "scientific-technical progress is the decisive source"<sup>37</sup> of higher contribution to economic growth. Scientific-technical work in transportation during conversion of economic strategy for the eighties will be characterized

i. by further technological breakthroughs in all phases of transportation, construction and repair processes as well as by their optimal configuration,

ii. by the broad introduction of new technologies such as microcircuit computer technology and robot technology as well as technical solutions to the problems of conservative energy consumption and detachment from dependence upon imported fuels,

iii. by a substantial acceleration of the development of and the construction of rationalization facilities having, amongst other purposes, the goal of saving in a planned manner labor time and jobs,

iv. by the further complex perfecting of instrumentaria and methods of administration, planning and industrial accounting which contribute to minimization of transportation cost and to securing effective transportation within the framework of available capital.

An important point of departure for obtaining higher economic effectiveness of science and technology as well as toward attaining peak performance consists in deriving scientific-technological goals still more directly from the process of industrial reproduction, in linking them up with concrete and ambitious economic funding and in concentrating the scientific potential still more intensely on the decisive foci.

Of great importance for the utility of scientific work is the establishment of close mutually fructifying cooperation between those giving out contracts and the contractors during the entire processing and initiation period (which should be as short as possible) of the particular task. At the same time the foreground of administrative activity must be occupied by the development of high creativity among the research collective by providing favorable composition of the research organization together with good working conditions, planning which is as prompt as possible for the introduction of scientific-technical results immediately after they have been disclosed, together with the exact computation of practical economic effects as compared with prescribed goals.

## The Perfecting of Administration, Planning and Industrial Accounting

From the increasing socialization of socialist industrial reproduction at a higher level there arises the obligation "to seek continuously new routes toward perfecting administration, planning and industrial accounting."<sup>38</sup> The centrally supervised carriers are today directly administered by combine administrations or largely in accordance with their principles. Also in the locally administered domain of transportation, with the creation in 1982 of

transport combines, there has been created a form of administration which corresponds to our present conditions of industrial reproduction. With this form of administration all efforts aim at further strengthening the responsibility of the combines and their factories on the basis of the plan.

With the new freight transportation ordinance which has been in effect since 1 January 1982 there exists in the GDR for the first time a uniform transport law for assembly and performance of inland freight transport by all carriers. The transportation parameters as an expression of socially necessary transport performance are thereby defined as a binding legal standard and all participants in transportation are thereby obligated to lower in a planned manner their transportation cost, to support the energy-optimal division of labor between the carriers, to contribute in socialist cooperative work to territorial rationalization in the domain of transport and to guarantee a high level of utilization of transportation facilities, especially through rapid and punctual loading and unloading.

Thus the law acquires mobilizing effect in the realization of the design envisaged by transport policy. A stimulating effect also emanates from the new inland freight traffic charges which have become effective at the same time raising price levels by an average of 60 percent. In consequence of these charges as well as a result of the special certificate of transport cost within the context of industrial accounting for all combines and factories of the GDR there will from now on be a perceptible effect upon the lowering of production-consumption arising from transportation. The supply of operating funds is made dependent upon attainment of the goals of directives prescribing reduced transport cost. With the development of transport norms new paths are now being opened up. In consequence of the interrelation between commodities production and transport cost one may expect the socially requisite amount of transport performance to be still more firmly determined and planned and the work of the combines and factories still better evaluated and stimulated on the basis of the achieved result. It is necessary that this control function of economic regulations will in future be further developed for the complex conversion of economic strategy.

#### The Role and Responsibility of the Workers in Transportation

In the GDR 480,000 workers are engaged in transportation. They bear a great responsibility for social development in our country. The creative power of the workers, their activities and their behavior in the industrial-reproduction process exert decisive impulses toward higher productivity and efficiency in the processes of transportation, construction and repair. It is expected of the workers of the transportation system that they shall safely, punctually and in good quality transport the 11 million citizens which use public transportation daily together with freight having a total value volume of 1.3 billion marks daily. In addition there is entrusted to them a high volume of the national wealth which is greater than the physical plant investment of the other branches of the national economy in a basic funding including infrastructure amounting to about 250,000 marks per worker. They bear responsibility for the effective utilization and careful handling of this investment. From this there arises first and foremost a demand for a high degree of order,

discipline and reliability in the working processes of transport preparation and performance. Therefore of first importance is the political-ideological work of the administrators as well as of the party and trade union organizations toward the aim of developing appropriate modes of thinking and behavior. The best way of achieving this is by socialist competition. At the same time--as experience shows--socialist competition is becoming ever more the primary field for the active cooperation of the workers in the thorough intensification of transport processes as well as in the opening up of those reserves which lie within the still substantial (in part) differences in level of the results of transport rationalization in branch operations and territorial operations. The high moral and physical demands placed upon the workers in transportation create an obligation on the part of the entire state to confer special attention upon the steady improvement in their working and living conditions and to further enhance the social recognition of their performance.

All this shows: the shaping of the developed socialist society places higher demands on the activity both of the central organs of the state and of those which are local. Their responsibility for the development of an effective transportation system is increasing. In order to transform the advantages of socialist conditions of production in a manner which is in accord with the new requirements and conditions of transportation practice it is necessary everywhere to further perfect the political guidance of economic processes. In this sense the collectivity, a high level of order, personal responsibility, socialist democracy and unconditional fidelity to the plan even in each collective of workers are decisive factors. Therefore the center of every activity of the state and of economic administration should be still more firmly occupied by the development of the political consciousness of the workers as well as by the promotion of their activity and readiness for performance.

In this way we shall be most in accord with the doctrine laid down by Marx, who trusted "in the creative power of the masses of the people as an historical subject."<sup>39</sup> Now it is our task so to use the abundant powers of the workers that the socialist transport system of our country shall also in the future fully meet its responsibility to contribute to steady economic growth in accord with the economic strategy laid down by the 10th Party Congress of the SED.

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[Report by Erhard Wetzke and Manfred Wilhelm on the colloquium for economic analysis of energy and material management, sponsored by the Economic Research Institute of the State Planning Commission, in East Berlin, December 1982: "On the Economic Analysis of Energy and Material Management"]

[Text] The management strategy developed by the 10th Party Congress of the SED for the 1980's calls for attaining // "a constantly improving relationship between the outlay of basic finances, of raw materials and manufacturing materials, human labor and the result, our national income"// [in italics]. (Report of the Central Committee of the SED to the 10th Party Congress of the SED," reported by Erich Honecker, Dietz Verlag, Berlin, 1981, p 55.) At the fifth meeting of the Central Committee of the SED, Erich Honecker stressed the importance of reducing manufacturing consumption as a principal reserve for the continued growth of our national income. (C.f. also "From the Concluding Words of Comrade Honecker," Dietz Verlag, 1982, p 28.) This is the source for the task of constantly seeking ways to open up new reserves, to find additional possibilities for a fundamental improvement in energy and material management.

A symposium of the Economic Research Institute of the State Planning Commission for the economic analysis of energy and material management, which took place in December 1982 in Berlin, was devoted to this subject. The secretary of the basic SED organization of the Economic Research Institute, Dr Reuss, welcomed representatives of the State Planning Commission, other state organs, the Academy of Sciences of the GDR, from universities and combines on behalf of the director of the Economic Research Institute. Reuss stressed the favorable timing of the colloquium, immediately after the fifth meeting of the Central Committee of the SED, at which the concrete objectives and requirements in energy and material management for 1983 and beyond were formulated. He pointed out that one-third of the increase in the national income had to come from reducing manufacturing consumption, and reducing manufacturing consumption was a complex task, which is a basic premise in the economic growth of the GDR. The objective of the colloquium, based on the requirements of intensively expanded reproduction, was to give new impulses to the analysis of economic contexts in the area of energy and material management.



Conference material (developed by the Department for Balancing Interrelated Production at the Economic Research Institute) and the keynote address by Prof Koehler (Economic Research Institute) provided the basis for discussion.

The conference material presents the work and the results which are derived from the application of value-in-kind balance of interrelated production in central state planning and which are suitable for penetrating the costs and benefits of energy and material use in the economy more deeply. (C.f. Authors' collective, "Development and Testing of Barter Balancing of Interrelated Production in the Central Planning of the GDR," WIRTSCHAFTSWISSENSCHAFT No 6, 1976; Authors' collective, "Testing Barter Balancing of Interrelated Production in the Planning Process," WIRTSCHAFTSWISSENSCHAFT, No 3, 1978; K. Wetzker, "Determining Total Utilization--An Important Method in the Economic Analysis of Material-Management Contexts," IFL MITTEILUNGEN No 3, 1982.) Analyses of expenditure from an economic point of view, which also take into consideration the complexity of interrelationships in manufacturing, provide important bases for determining favorable manufacturing and distribution structures. Total utilization, on the basis of which the analysis for the conference material was developed, is not understood primarily as an indicator. The focus is rather on communicating a new method of observation and on showing how a new dimension in analytical activity and decision making can be opened up.

The objective requirements for intensively expanded reproduction were the starting point for Koehler's talk. He stressed that, on the basis of new theoretical and practical results, the colloquium should contribute to the more rapid implementation of the requirements of intensively expanded manufacture. An exchange of ideas was needed on the following questions:

--What experience is available on attaining an improved level of management of energy and material?

--How is it possible to investigate the structural framework of the economy more deeply, and in particular to clarify more extensively the relationships between energy and material management and the structure of production and export, in order to raise economic efficiency?

--How can honest standards for the development of economic efficiency be created?

--How can economic thinking be spread further?

Koehler emphasized that balancing interlocking production and in particular the in-kind interlocking balance are eminently suited to finding solutions to these problems. Great importance attaches to the category of "full expenditure." Other presentations went into this category in detail, as it comes to exist on the basis of the in-kind interlocking production balance. Solving economic tasks demands adequate methods for measuring expenditure and result. With intensification the reciprocal relationship between efficiency and proportionality becomes closer and closer. It is, therefore, necessary to gain a better understanding of economic contexts by using suitable instruments. Balancing interlocking production and full expenditure are outstandingly well suited to penetrating economic interconnections. For this reason it is extremely important to use full expenditure

for economic policy statements. Koehler stressed that the analysis of full expenditure leads to a qualitatively new economic way of observation, leaving the plane of direct material employment and including the material consumption of all pre-stages of the work-sharing manufacturing process. This goes beyond the limits of branches and areas. New possibilities for energy and material conservation are emerging from the analyses of full expenditure and they show that the greatest possibilities for conservation are outside direct employment.

Important conclusions for targeted structural changes are the result. Koehler characterized full expenditure as an important indicator of efficiency, which must be accorded a corresponding place in the system for calculating economic efficiency. In practical terms, full expenditure has proved itself particularly in calculating efficiency for foreign trade, in which the inclusion of full imports costs for exports led to qualitatively new statements. With respect to the inclusion of full expenditure in the planning process, Koehler determined that the problem was simply one of including the balancing of interlocking production in the planning process itself. He identified the following tasks to solve this problem:

- making available results of the calculations on interlocking quickly and in an operative way,

- reducing the product-concrete material consumption even more,

- linking the balancing of interlocking production of different degrees and levels of aggregation,

- qualifying the statistical summing up of the balances of material-equipment and consumer goods and normative standards.

Koehler came to the conclusion that the indicator "full expenditure" is preeminently an instrument for analysis and preparation of decisions at all levels and in all phases of planning. Additional progress in this area presupposes,

- that there can be an exchange of experience previously available from the utilization of full expenditure for analytical work in different areas of the economy;

- that additional practical possibilities for utilization will be opened up to make a contribution to decision making;

- that the statements resulting from full expenditure are integrated into the indicator system of efficiency rating and planning;

- that new theoretical and practical general findings for research can be derived from using the category of full expenditure.

To achieve this, Koehler stressed, the close cooperation of the research institutions working in this field and practical organs is necessary.

Detailed answers were given in the discussions to a large number of the questions touched on in the lecture and/or the prepared material.

The efficient use and evaluation of available energy sources and raw materials finds its expression in how successfully the outlay in primary energy sources and materials per unit of the economic end product can be reduced. For this reason, an indicator of the full primary energy and primary raw material cost referred to one unit of manufactured end product gives a good reflection of the level of refinement attained.

Using this indicator, Specht (Economic Research Institute) presented a few possibilities for analysis derived from the results of calculations on interlocking with the in-kind interlocking balance with the help of the coefficients of full expenditure. They referred primarily to economic aspects, that is to say, to the ranking of areas and products according to their degree of refinement and also the comparison between them. It was demonstrated that the products are sufficiently representative to draw conclusions--naturally taking other contexts into consideration--for the formation of an effective production and export structure.

Specht also drew attention to some problems which can limit the informational value of the calculations to to whose solution further intensive work must be devoted (inner structure of nomenclature positions, problems in evaluation and the use of the results modified by these problems, the degree of compilation for material consumption. He summarized the most important results of the calculations he carried out in the following points:

1. It can be shown how the primary material going into an area or a product is used in the end product through all stages of manufacture and how areas and products differ according to their degree of refinement.
2. Important conclusions by area result from a calculation of the degree of refinement of exports at world prices, allowing clear preferences to be set for selective efforts to achieve a higher refinement of exports.
3. Statements which are permitted by the order of degrees of refinement for export according to area, are confirmed by the results according to product. The calculation of degree of refinement by product also allows statements about the development of the degree of refinement by technical stages.
4. It is possible to identify primary material consumption of the end product and its components for products and areas according to sources (own production, imports from the socialist or the non-socialist economic area) and by material complexes and/or products. This allows the requirements for primary material sources and imports of materials, which result from the future development of the end product's capital, to be determined, and areas and products can be identified which are crucial in conserving material and imports.

Energy economy questions constituted an important part of the content of the conference.

Dr Wetzker (Economic Research Institute) attributed this importance to the significance of energy sources within the economic complex of resources (one-third of the volume of primary raw materials), to the relative homogeneity of the energy complex (questions of evaluation are less important here) and to the place of the

energy complex within the division of labor in society, which excludes complicated feedback in the interlocking relationships. With this as the basis, the information-side assumptions of the in-kind interlocking production balance and its most important analytical possibilities from an energy-economic viewpoint formed the core of his talk.

Wetzker indicated that at present 18 energy sources are contained in the nomenclatura of the in-kind interlocking production balance, and that work is being carried out on adopting additional energy positions. He pointed out the following to characterize the input information:

--that with the balances compiled in the in-kind interlocking balance, almost 95 percent of the goods production of the Ministry for Coal and Energy can be documented specifically by product,

--that the model takes account of 630 product-related coefficients of energy consumption (75 of them in the ministry itself),

--that with these 630 coefficients, 84 percent of manufacturing consumption of energy sources can be assigned specifically by product.

With respect to the analytical possibilities of the in-kind interlocking balance, Wetzker pointed out that the energy-economic portion of full expenditure is the full (cumulative, objectified, total) expenditure of energy. It can be calculated both specifically by product according to the individual energy sources and also in its totality as full primary energy outlay for individual products and areas. In the analysis of individual energy sources, data can be obtained in two directions: First the proof of full energy expenditure is produced, thus proving advance work in energy in the 600 positions of the in-kind interlocking balance, second, the energy sources are assigned to the final product according to products, areas and capital.

Wetzker pointed out that the full primary energy content is an important presupposition for making a material-economic judgment about a product or area. A fundamental new question, resulting from the calculation of full primary energy content, is the treatment of objectified ("grey") energy imports and/or analogous "grey" energy exports. He went into the problem of evaluation in detail, pointing out that the calculations are carried out on a natural basis, at domestic prices (energy delivery prices) and at world market prices.

In conclusion, Wetzker stressed that perfecting the in-kind interlocking production balance from an energy-economic aspect must be directed at further increasing the possibilities for its use in decisions about the economic balance of the plan, about the efficiency of exports and about the use of imports.

In this context, Dr Riesner (Zittau Engineering University) spoke about the possibilities of influencing energy requirements, with particular attention to objectified energy, and he grouped the potentials for conservation. In first place he mentioned influence through the direct use of energy (energy requirements that arise immediately during the manufacture of products as factory consumption and/or for product use.

The reduction of energy requirements by influencing material-economic effects is of great--and very often underestimated--importance. Since every material is made from raw materials by means of the appropriate energy processes, it is the recipient of objectified energy, which is often brought in through highly energy-intensive process chains. This explains the high energy intensity of products of the ferrous-metal industry, the non-ferrous-metal industry, plastics and other materials which are used in bulk. From this point of view the sharply increased demands on the material economy have an immediate effect on the economic energy balance, since rising production must be achieved with a specifically reduced use of material (1 kg of steel less means 10 kgs less raw soft coal). It is matter of intensifying the material economy in those places where objectified energy consumption is very high.

Often it is possible to attain a particular utility value with different materials, but it is becoming increasingly more necessary to consider the energy effects of material substitution. Targeted material management has substantial effects in the energy balance as well. Paying heed to and using this unity in purposeful way represents a great energy conservation potential which must be exploited more intensively. In addition to these energy-economic effects, which can be analyzed and controlled using the methods of full expenditure, Riesener indicated further possibilities in the influencing of energy needs:

- influencing the use of waste products and energy from waste,
- influencing process chains,
- influencing structural effects (export, import, domestic needs structure),
- influencing ways of living (consumer behavior),
- influencing forms of economic organization.

In conclusion, Riesner stressed the knowledge gained from these observations that a considerably more complex approach to problems, avoiding observations within too narrow areas of interrelationship, the consideration of the link between material and its management, consideration of the chain effect of a cause, consideration of the association with the manufacturing organization and many other things must be a stronger part of leadership.

The establishment of indicators for full expenditure, including the interrelations representing them by means of interlocking models and from that the calculation of matrices, is widely known to be associated with relatively high economic, programming and calculating costs. There are also problems that result from the investment of time, especially in operative use.

Professor Trepte (Carl Schorlemmer Technical University, Leuna-Merseburg) discussed this problem from the point of view of determining full expenditures for the qualification of balancing material, equipment and consumer goods. He presented a method which is suitable for understanding the interlocking of material flow in the environs of a balance--if need be as far back as the raw material.

Using this method, full expenditure and/or the interlockings corresponding to it can be determined without a structural matrix, relatively quickly and uncomplicatedly, in a use-friendly way and using only office computers. The interlock relationships which are to be analyzed and represented can be precisely delineated in accordance with the concrete situations that require a decision.

The material flow systems are set up by the computer in accordance with the requirements, excluding all interlockings not essential to the concrete decision situation, which in chemistry can be particularly complicated and extensive.

Dr Feldmann (State Planning Commission) discussed the work with the aggregated value interlocking production balance according to ministry in the State Planning Commission in his paper. This value interlocking balance is constructed on the basis of the detailed in-kind interlocking production balance. Its job is to scrutinize the coordination of the plan targets for the ministries at an early moment in the work of formulating the plan. Previously this coordinating with the value balances was done according to ministry. The critical magnitude is manufacturing consumption. In view of current economic conditions, these traditional methods of determining manufacturing consumption are inadequate. This led to the use of the value interlocking production model by ministry. It is necessary supplement to the in-kind interlocking balance, from whose information base the interrelations of material consumption are being adopted. The initial experiences of work with the interlocking models according to ministry were formulated by Feldmann as follows:

--calculations must be made using the values from the plan;

--the usability of the model is critically dependent on the quality of the coefficients of material use;

--the model can be used for complex formulation calculations, since one can assume that in this case errors in the individual coefficients cancel each other.

Hegwein (State Planning Commission) dealt with a similar problem in his paper on work with the full expenditure matrix of the interlocking production balance of the total social product. He put forward the proposal of working up appropriate instruments to make full expenditure addressable and capable of being influenced.

Dr Ludwig (Academy of Sciences of the GDR) discussed the connection between full expenditure, long-term structural policies and needs complexes in his contribution to the discussion. He was particularly concerned with the obligation of resources for consumption according to needs complexes.

Starting from an analysis of the effects of material management on highly aggregated economic proportions, Dr Zeidler (Bruno Leuschner University of Economics, Berlin) spoke on the subject of full expenditure related to consumption. In addition he presented different calculations on the connection of material management and growth ratio between Department I and Department II.

Dr Lauenstein (Carl Schorlemmer Technical University, Leuna-Merseburg) explained the use of interlocking models in chemical combines. He demonstrated how inter-

locking models can be used for selective intensification from the point of view of the entire combine. On the basis of the analysis of full material expenditure concrete points emerge from which assignments for science and technology can be derived.

In his presentation, Dr Hoffmann (Leipzig Technical University) treated the determination of full expenditure for the economic evaluation of variations in city planning in early phases of investment preparation, which serves the purpose of finding the best sequence of locations for complex apartment construction, based on full expenditure, and the optimal building designs at the individual locations. By applying full expenditure, the aim was to prevent a solution which at first appeared to be cost-saving from the point of view of one-time expenses from turning out to be uneconomical as a consequence of running expenses.

Riess (Mining Academy of Freiberg) gave a report on studies whose aim is to determine the share of the prestages in the export of final products, the connection between the domestic and world price level and the magnitude of influence of world market relations. A methodological peculiarity is that work is being carried out with separate coefficient matrices for consumption of domestic materials and for consumption of imported materials in the model being used for the studies.

Dr Kardaetz (Economic Research Institute) pointed out that in the analysis of material-economic connections on the basis of in-kind interlocking productions balances two methods of observation have proved themselves (specific primary expenditure of the end product, final use structure of the primary material). Through the future application of an optimization model of the in-kind interlocking production balance possibilities also emerge of also using these methods in the form of marginal analysis. Through marginal analysis data on the efficiency of material use as a basis for variant calculations on the changes in the structure of the end product, exports and imports are to be generated (e.g., calculating the effects of reducing imports).

For the practical application of analytical methods it moreover proves to be appropriate to establish the most important influencing factors for such synthetic indicators as that of the degree of refinement. Otherwise, their complexity makes it extremely difficult to gain an overview of them.

Kardaetz gave a theoretical interpretation of the degree of refinement based on a model. He described it as "the reciprocal amount of the total of the evaluated full coefficients of expenditure of domestic primary material and of imports for the manufactured final product."

In this way, it is possible to make important assertions of content to the effect that the decisive refining effects of the raw materials branches can be demonstrated, not primarily in branches themselves, but mainly in the raw materials-processing industry. It becomes particularly clear from an analysis of the structure of final application into which type of final product the energy sources and raw materials mainly go. From it estimates of the need for raw materials can be made, based on the development of the final product.

In connection with the marginal method of observing full expenditure, Kardaetz pointed out that in the balance model the division of material supplies according to domestic and imported material has to be given exogenously, while in the optimization model of the in-kind interlocking production balance the most advantageous division each time according to domestic and imported material is calculated endogenously.

On the basis of the coefficients of full expenditure, the twin variables are calculated in the model for the final product (domestic application, exports). The reciprocal value of these twin variables represents the marginal degree of refinement. It expresses the change in consumption of primary material given a change in the capital of the end product of one unit (for example, of export). This allows better references to be developed about the consequences resulting from operative balance changes in the case of single items of the final product for the particular degree of refinement.

In conclusion, Kardaetz discussed methods for determining factors influencing the development of the degree of refinement.

It is not disputed that technological-economic based normative provisions of material consumption in yhr central state nomenclatura must be an extraordinarily important basis for calculating balances and, correspondingly, for the coefficients of full expenditure. Uhlig (Institute for Light Construction, Dresden) indicated problems and tasks in this context:

--Research must continue in the standardization of concepts and the content of normative work.

--Comparative bases in normative work must be drawn more precisely (for example, the period of material consumption must correspond to the period of product manufacture).

--A series of nomenclatura problems must be solved, including adaptation to balance nomenclatura.

--The simultaneous timing of plan schedules (balancing--development of normative provisions) must be reinforced.

Statistical interlocking balances are very important for developing plan interlocking balances or for independent analytical activity. Consequently, for the reporting year 1982, the next statistical interlocking production balance for the total social product will be set up in a nomenclatura of 106 product groups, probably until the first quarter of 1984.

Dr Siehndel (State Central Administration for Statistics) estimated that the category of full expenditure had proved itself in the practice of establishing and using statistical interlocking balances and that its field of application is constantly expanding.

The following points are at the focus of the application of statistical interlocking balances:



- full expenditure of material imports for the economic end product;
- the development of the end product, of the gross product and of goods manufacture and the use of the economic end product for investment, consumption and export;
- problems of conserving material and energy;
- the efficiency of exporting and importing;
- the primary energy and raw material outlay per unit of economic end product.

In his closing remarks Koehler paid tribute to the high level of the exchange of experiences and reciprocal information at the colloquium. He stressed the similarity of the solutions formulated for different questions and/or in the different practical organs occupied with the balancing of interlocking production and in research institutes.

Material-economic processes are currently being analyzed at all levels of the economy with great success, using interlocking production balancing and full expenditures, and efficient manufacturing and export structures are being calculated on this basis. This practice meets the high demands which the realization of the party's and the government's economic strategy places on all functionaries in the economy and which, as comrade Erich Honecker once more emphasized at the Fifth Plenary Session of the Central Committee of the SED, has among its goals // "to use all the raw materials at our disposal extremely economically and to refine them highly.// ("From the Concluding Words. . . " loc. cit. p 29). Koehler stressed that it was correct for problems in calculating energy requirements, the possibilities of energy conservation and of refining our use of energy and primary materials to constitute an area of emphasis in the discussions. He also referred to the great importance of calculating full expenditures for imports. Determining efficient export structures which permit the largest possible hard currency profits with minimal import expenditures and minimal use of energy and primary materials from domestic sources is a primary concern in the struggle to continue the policy of principal tasks.

In conclusion, Koehler evaluated the colloquium as a valuable exchange of experiences which, in addition to ideas for an even more efficient application of interlocking production balancing, also brought out problems whose solution requires a further intensification of cooperation. As a result of the colloquium, summary material is being put together at the Economic Research Institute. Another colloquium on this topic was proposed.

9581  
CSO: 2300/246

MINISTRY SETS GUIDELINES FOR SELECTION OF MANAGERIAL PERSONNEL

Budapest FIGYELO in Hungarian 21 Apr 83 p 13

[Article: "Ministerial Guidelines: Selection and Appointment of Managers"]

[Text] The Minister of Industry issued new guidelines concerning the selection and appointment of managerial personnel.

The purpose of the new competition system is to make the selection of enterprise managers more dependable. This system should broaden the possibilities to choose managers from the ranks of professionals with leadership qualities and should enable everybody to run for a leading position befitting his abilities and training. Further, the new system should facilitate the healthy mobility of well-trained professionals, their changing of jobs from one sector of the national economy to the other and from one enterprise to another.

The competition system does not at once preempt the planning of replacement and change of managers--it has to be introduced gradually.

At the outset a public invitation to applications for a managerial position should only be issued if

- the requirements of the managerial sphere of activities in question demand a broader choice of applicants; and
- the fulfillment of the job advertised requires special training or practical knowledge.

The competition system cannot be used in the case of certain industrial enterprises. Public invitation for applications will be authorized by the manager in charge of hiring. The invitation for applications should be issued soon enough to fill the position--if possible--as soon as it becomes vacant.

The manager in charge of hiring can issue special invitations to qualified professionals to present their applications. The application will include

- place of work, present position and sphere of activities, income, earlier positions, professional scientific work and its results;
- scientific degree, if any, and awards;
- plans for future scientific work;
- certified copies of documents concerning professional schooling, political training, knowledge of languages and other qualifications; and
- detailed biography

It is recommended that a committee be formed for evaluating the applications. The composition of this jury and the selection of its chairman are decided by the manager in charge of hiring. A representative of the pertinent personnel apparatus must participate in the jury's work. It is reasonable also to invite pertinent Party and trade union organs and a representative of the Supervisory Committee (if any) to collaborate. The jury

- makes preliminary comments on the applications received,
- eliminates the applications which do not meet the requirements,
- acquires the supplementary information
- conducts personal interviews with the applicants and
- presents a proposal within 30 days from the deadline of the presentation of applications to the person in charge of nomination.

The manager in charge of hiring makes a decision within 15 days after the jury's proposal. Upon this, the pertinent personnel apparatus inquiries about the professional opinion of the Supervisory Committee (if any), takes into consideration the stance of the democratic forums or the representative organs of the workplace involved, conducts the prescribed settlement of possible conflicts with the Party's sphere of authority and presents the nomination documents.

The pertinent personnel apparatus informs the applicants in writing about the decision taken insofar as they are concerned. The secrecy of the applications must be assured. The applicants must not suffer any harm in their employment because of their participation in the competition. In cases of appointments of directors, the long-term requirements and tasks related to the enterprise's business must be defined in accordance with the principles of cadre management. Such requirements may be

- improvement in the profitability of the enterprise or the restoration of profitability, if lost;
- compliance with the duties related to the development of research and the tasks of state investments;
- compliance with the clauses of international treaties;

- implementation of certain tasks in connection with organizational development;
- working out an application of a new internal managerial and interest system;
- compliance with the duties of a business agent; and
- implementation of the tasks related to manpower, experts' structure, policy of cadre management, education, social policy and the practice of enterprise democracy.

The definition of these tasks cannot violate the rules concerning the autonomy of the enterprises. The right to give orders to the managers because of their employment cannot include such things that the founding agency itself cannot demand from the enterprise. Compliance with managerial duties must be checked when the managers' activities are evaluated.

The periodic evaluation (qualification) of managers' activities must be performed regardless of whether their tenure is for a definite or an indefinite period of time.

In case of tenures for a definite period, it is recommended that the length of the term be taken into consideration that it be made at least 6 months before its expiration.

In connection with the introduction of a broader system of applications, it is reasonable to put emphasis on the practice of managerial tenures for a definite period. The purpose of such a policy is to foster accommodation with the changing requirements, to suppress the disadvantages of appointments for indefinite periods, to help carry out timely changes in the cadres in a humanitarian way and to make it possible for each manager to keep his position so long as he can successfully perform his task.

Managers of enterprises under government control can be appointed for either a definite or an indefinite term. Tenures for a definite period should be chosen when the position is being filled through competition, when it is a case of a managerial appointment for a new enterprise, when the new manager has to perform tasks which can be evaluated within a definite period of time or for any other reason the manager in charge of hiring considers justified. The length of definite managerial terms should in general be 5 years.

It also seems justified to tend more toward fixed tenures in cases of appointments of deputy managers and other leading officers involved in the sphere of activities of the enterprise.

The growth of enterprise autonomy, the expected mechanism effects of the concrete business and interest processes and the corresponding sharing of responsibility and increase in the personal liability of the managers justify certain changes in the sphere of activities and scope of authority.

The manager is entitled to appoint his deputy and to determine his scope of authority, including permission for trips abroad.

The enterprise managers should--if possible--not increase the number of deputy managerial positions. If there are various deputy directors, a first (general) deputy manager should be appointed in order to assure smooth management.

The new regulations concerning the appointment of enterprise managers and the hiring and firing of their deputies will make it possible that the work of personnel meet the requirements of our era, and that the work become more flexible, objective and democratic.

12312

CSO: 2500/240

# INVESTMENT DECISIONMAKING, FINANCING IN NEED OF REVISION

Budapest FIGYELO in Hungarian 21 Apr 83 p 3

/Article by Dr Agnes Radics and Dr Agnes Tilcsik: "Who Decides and Who Provides the Finances?"

/Text/ Since 1968, the system of investment decisions had been based on shared authority between the state and the enterprises. The principle of dynamic maintenance was the criterion by which the categories of state and enterprise decisions were marked off. The idea was that the enterprises, by their own decision, would carry out improvements associated with maintaining equipment and with smaller expansions financed by investment sources generated by the enterprise and by related credits.

Thus, replacement of equipment falls within the enterprises sphere of decisions, although replacement is basically a national economic category: while replacement must be accomplished at this level, it is not justified in every enterprise. It is obvious today that enterprises which function uneconomically and with low efficiency must not be given the possibility to replace equipment, and even the the removal of functioning equipment can be justified. But in places where outdated equipment should be replaced with up-to-date tools, this often requires an investment of such a large volume that it far surpasses the development funds available to the enterprise even if they are supplemented with credit. In such cases, because of its effect on the entire national economy and its output, the given development surpasses the decision and financing capabilities of the enterprise.

## Categorization with Trippers

It is obvious today that categorization based on dynamic maintenance does not correspond to the formerly presumed national economic content; the allotment of resources based on such a system of decisions will also contradict in principle the requirements of selective development. The solution usually is that the increasingly stringent financial requirements, in principle, are softened by various individual rebates.

In practice, apart from extreme cases, to sort investments into state and enterprise decision categories is possible only with compromises lacking a theoretical basis.

Excessive importance is attributed to the macrolevel scope of decision categories. Therefore, the category under which a given improvement should be accomplished often is not decided on the basis of the nature and importance of the development. For instance, large investments left out from the category of decision by the state were repeatedly transferred to the enterprise-decision category although their accomplishment was unequivocally based on a central decision and the enterprise was able to finance the development only with the help of considerable state allotments (tax relief, total retention of amortization, etc.).

In the current practice of investment financing, it is an increasingly frequent phenomenon that an individual development action is financed jointly by moneys with diverse requirements. In view of the fact that, based on the decision system in effect, it is possible for an enterprise to accomplish several categories of investments simultaneously, it is logical for the enterprises to try to find the suitable form of financing for every one of their investments, at times grasping rather arbitrarily at individual phases of the development process, and not without success in the majority of the cases.

The development activity of enterprises is composed of a series of various investments accomplished simultaneously or subsequently. It is often debatable what is considered "independent investment." How economical a given action is will, of course, vary with this function. For instance, an investment can be made economical by building or having built the necessary infrastructure in the framework of another investment. But very favorable results can also be achieved by dissolving a narrow-scope capacity developed earlier.

#### Transforming the Deciding Jurisdictions

To reorganize the deciding jurisdictions:

- The role the state should play in development activities, and the means of intervention, should be clarified;
- The criteria of categorization should be defined for the multitude of decisions needed to accomplish development.

The role of the state in development activity is much more differentiated than is presumed by the current guidance system. No sharp limits can be drawn between state and enterprise decisions.

The investment decisions and financing capabilities of the enterprise are significantly, and often decisively, influenced by the various indirect and direct state preferences, while state decisions are often shaped through enterprise initiative and preparation of the decision by either obvious or veiled means.

The greater part of today's state investment decisions are in reality mere formalities. The majority of actual investments accomplished within the category of targeted and other state investments are decided by departments,

chief officials, councils and rather frequently by enterprises (for example, MAV /Hungarian State Railways/, OKGT /National Oil and Gas Industry Trust/, etc.) within the scope defined by the state. At the same time, some of the investments belonging to the enterprise sphere are accomplished on the basis of state decisions. This multiplicity must be taken into account when jurisdictions making the decisions are defined.

One must separate the general and necessary exercise of influence by which the state affects development activity indirectly, through the formulation of the general conditions of investment activity, from direct decisionmaking regarding some particular development. In the formulation of decision categories, the latter--that is, state intervention associated with actual individual developments and the mode of their accomplishment--must be kept in mind.

In connection with individual developments, decisions are made not only with respect to their realization. An important part of the sequence of decisions is to work out the conditions of financing. This is decided by the quasi-owners of the money. In our view, the financing organs must have even more independence in the future. Moreover, they must acquire an interest in seeing to the systematic application of the requirements of rentability and effectiveness. This means that "business" considerations should prevail.

In defining the decision categories, it is expedient to start by considering who has the right to decide, after weighing the goals and conditions and, primarily, the financial possibilities.

### Three Large Groups

In this respect, investments can be divided into at least three groups:

1. There are and will be such economic-political goals, the realization of which require direct state decision. Such are, for instance, individual developments associated with agreements among the CEMA states, the exploitation of natural resources, the statewide development of infrastructure and also certain new, productive investments and the establishment of large enterprises which require large capital investment and will have considerable influence on the economy as a whole.

But a state decision involving the necessity of development does not mean that it should be accomplished by loosening the bounds of the general economic regulation.

The means have to be found to transmit the state decision to the enterprises in accordance with our intentions. It is a basic requirement that a state decision involving a certain individual development should not represent a dispensation from general management requirements for the enterprise which will accomplish that decision. Instead of the "need to grow," so widely found



today, accomplishment should be motivated by an interest in increased profit. We think that such means would be the introduction of various forms of purchases by the state.

2. In another group of investments, there is no need for state decisions, but it is justified, nevertheless, that they be accomplished only in agreement with the state. This group includes investments which have significant influence on the macrostructure, have a considerable effect on foreign trade, and are associated with tasks derived from CEMA cooperation, the realization of which would generate an expanding circle of changes also involving other branches.

These investments would basically be initiated by the enterprises, and their realization would also take place within the frame of generally accepted rules in the economy as a whole. It is justified, however, to give some kind of "veto power" to the state in this group of investments because the investment decision necessitates the weighing of factors, some of which are outside the economic scope of a given enterprise.

3. The third group includes developments which need no state agreement for their realization. The investor makes his own decision about the development. Of course, this does not mean that this group of investments, which in our opinion will include a decisive majority, would be completely free of state influences. The state can exert influence by defining the general conditions for the development activity and through various allowances. We consider it such a tool when the state declares financial allowances for such developments in the national economy which would serve the accomplishment of economic-political priorities, but it is up to the enterprise or entrepreneur to decide whether it wants to take advantage of them.

We propose that this group of investments be called the decentralized decision group. The enterprise investment designation is incorrect because the group includes not only investments by enterprises but also by budget planning organizations unless, because of their importance, they belong to one of the previous groups. Thereby we want to emphasize that we expect true economy from the budget planning organizations. Naturally, developments by the councils also are grouped here.

The three categories described express basically the legal side of the actualization of and permission for investments. It is, of course, essential that no greater importance be attributed to this grouping than it indeed has. To illustrate how real this danger is, perhaps it is enough to refer to the fact that, in the interest of "maintaining" the state-enterprise investment ratio developed on the basis of the current categorization, unprincipled compromises had repeatedly been made.

Our recommendations for the reconstruction of investment decision categories would conceivably be only one of the possible modes of a definitely needed change. This proposal is not a well-developed conception ready for introduction; rather it is offered as a thought provoker to induce discussion.

MAIN CROP VARIETIES SELECTED FOR SPRING PLANTING

Spring Grain, Fodder Crops

Warsaw CHLOPSKA DROGA in Polish 16 Mar 83 p 10

[Article by F. Goch (compiled on the basis of information from the Ministry of Agriculture and GZ, also from COBOR "Informers"): "Spring Grains and Fodder Crops"]

[Text] Leading Varieties

The time for launching spring planting chores is steadily approaching. It is therefore high time for the preparation of spring grain seeds if they are to be sown on schedule. Which are the spring grain and leguminous dominant crop varieties stored in our seed warehouses?

Let us begin with the grains. Three varieties for the cultivation of spring wheats have moved to the fore: Alfa, Jara and Sappo.

Alfa was developed at SHR in Kobierzyce. Its characteristics are: high yield, resistance to flattening and a moderate time to maturity. It belongs to the varieties having lower soil requirements. It is suitable for cultivation in a wheat-rye soil composition. In regions having an adequate rainfall it can also be cultivated in a rye soil complex, a good one maintained within a high culture.

Spring wheat of the Jara variety was developed at CSRS. Its features are: a very high grain production, low sensitivity to powdery mildew and rust, it can be harvested sooner than any presently grown varieties of Spring wheats in our country. It is adaptable for cultivation in wheat-beet soil as well as in wheat-rye compositions. Much like Alfa, it reacts in a relatively smaller loss of yield due to later sowing. An early as possible planting is indicated that is, as soon as moisture conditions allow for soil preparation.

Finally, the third variety developed in Sweden, Sappo. This one also belongs to the high yielding varieties, but it matures late. Its grain has good baking qualities. It can also be grown in a wheat-rye, or even a very good rye soil composition in a partnership cropping program with potatoes or pod-wheat combination.

The most highly rated varieties of Spring rye regionally acclimatized in our country, are: Aramir, Diya, Grit, Menuet, Polon and Trumf. Polon is the only one developed in our country, while Aramir, Diya and Menuet have been perfected in Holland, Grit and Trumf in the GDR.

Our country's agriculture has great hope for the Polon variety. Its characteristics are: good yield, good resistance to powdery mildew and mottle disease, and what is also important, considerable resistance to leaf rust, semptoriosa and leaf blight.

Polon produces best in good soil conditions. It is also adaptable for cultivation in weaker soil (good rye compositions, following root crops).

Holland varieties of spring rye primarily show good yields, resistance to flattening and disease, adaptability to combine equipment and for the use as a protective crop for so called butterfly small grain sowings. Although these varieties show good tolerance to acid soils, they produce best in acid-free conditions. An early as possible planting is recommended.

Varieties Grit and Trumf are produced for brewing purposes and have quite stringent soil demands. They are very sensitive to chemical reactions in the soil, which should be maintained close to the neutral condition.

We have regionalized oat varieties: Diadem, Lach, Leanda, Markus and Perona. Lach and Markus are of Polish development, the remaining are foreign.

The producers of been seeds have a wide variety to choose from, as many as six: Kujawski, Wozesny, Kaliski, Zefir and Sum (yellow-seeded), also Borek and Cebeco 102 (yellow-seeded). The first four varieties are of Polish development, while Borek was produced by Czechoslovakia and the Cebeco 102 in the Netherlands.

The varieties Zefir and Sum deserve particular attention since they have shorter stems and due to this are less apt to flatten, therefore are suitable for mechanized equipment. Varieties Borek and Cebeco 102 on the other hand require a shorter growing period.

The Karo variety of fodder pea is worthy of promotion for general use.

Encouraging the cultivation of broad beans, which is a valuable fodder crop (about 30 percent protein), we announce the availability of a new domestic variety under the name of Jasny II, developed by ZDHAR Strzelce (Plock Province). This variety is distinguished by its high yield and high protein grain content (much higher than that of the Nadwislanska variety - 0.964 t/ha content of protein in the Jasny II variety, compared with 0.948 t/ha in the Nadwislanska).

The above-mentioned varieties of spring grain and leguminous crop seeds are available to the farmers at the seed warehouses.

Next week we will write about the leading varieties of sugar and fodder beets, as well as fodder grasses.

## Beets, Fodder Grasses

Warsaw CHLOPSKA DROGA in Polish 23 Mar 83 p 10

/Article by F Goch/

/Text/ Leading Varieties

In the last few years there have been great changes in the selections of sugar beets, namely the single-sprout genetic varieties introduced for cultivation. These varieties presently occupy over half of the total acreage in sugar beet production. Worth mentioning is the fact that in the development of the single-sprout sugar beet, advantages were realized by both sides through the cooperation of Poland and the GDR. This cooperation gave name to the varieties PN-Mono.

Due to this cooperation four varieties of PN-Mono have been developed: 1, 2, 3 and 4. All of these produce a good root and leaf yield. They are distinguished by their high sugar content. The leaves are not subjected to the destruction of the leaf hopper. Furthermore PN-Mono 3 is impervious to sucker formation. In a work, these are valuable varieties.

In the cultivation of fodder beets, in the front running are: Goliat Poly, Rekord Poly, Senior, Tytan, Tytan Poly, Cyklop, Cyklop Poly, Albus and Poly Past. The last five of these varieties are in the so called "semisugar" category. They are noted for their high yield in dry pulp, the highest output of leaves, good resistance to periodic droughts and Fall frosts, their adaptability for drying and extended storage. The newest variety of fodder beets Saturn was introduced in 1982. It is suited for dispersed sowings.

Two new varieties of red clover made an appearance: Nike and Parka, which are classified as high yielding, providing an abundant dry volume, at the same time showing a good resistance to cancer and frost. Two valuable varieties of hybrid alfalfa are worth mentioning: Boja and Tula, which through many years of experience have proven themselves to belong to varieties wintering well, producing a good and fast regrowth with good digestive qualities.

Among the several new grasses entered into the 1982 register are: Costa in the white bentgrass variety, Maja and Solen in the perennial darnels, as well as, Polus, a multifloral darnel. These grasses are suitable in a meadow habitat. They are very productive, palatable and show a good protein content, having also the distinction of an early spring regrowth.

For those interested in establishing grasslands, we suggest that they carefully further investigate tall rye grass, awnless brome grass and the awnless varieties including timothy. Experience has shown that these grasses can be successfully applied both in intensive field production, or added to field seed mixtures. However, the new varieties of field timothy are found best suited for plowed soils and for newly developed modern pastures.

Tall rye grass can be cultivated in a mixture with red clover or seeding alfalfa. Awnless brome grass is a valuable variety for long term planned pastures, located on drier lands, in regions of limited rainfall. Awned brome grass is noted for its rapid regrowth after cutting, providing an abundant harvest of hay and green fodder. In addition to this, it is resistant to rust and extended drought.

#### New Potato Varieties

Szczecin KURIER SZCZECINSKI in Polish 29 Mar 83 p 2

/Article by PAP: "Healthier and Hardier"/

/Text/ Extensive efforts continue in the development of successive new varieties of edible and fodder potatoes. Several varieties have been recently developed and registered, of this so popular a crop in our country. The Potato Experimental Center in Zamarte, a subsidiary of the potato Institute in Bonin, produced a new variety which has been named Jasmin. It belongs to the very productive, early, edible variety. Distinguishing it is the rather large round tuber with a white skin. The pulp is light-yellow, insignificantly darkening upon boiling. This variety is resistant to a number of diseases often affecting potatoes, first of all, to potato canker and the leaf curling blight.

At the Vegetation Development Center of the Farm and Garden Seed Union in Plochocin, they in turn produced a variety called Wilga. It is in the category of moderately late varieties, very productive, featuring round tubers. The potatoes are covered with a pink shaded white skin. This variety is resistant to potato cancer and the potato-root eelworm. A variety developed at the Vegetation Culture Station in Woznice, Dybow, was registered at the same time under the name Dukat. This is a mid-early starchy variety, with a large starch content, reaching above 16 percent.

The pulp of the tuber is cream-colored, darkening quite a bit after boiling, as well as in its raw state. This variety shows good resistance to the leaf-curling blight.

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FACTORY DIRECTOR IVAN SIFTER URGES RADICAL CHANGES

Zagreb DANAS in Serbo-Croatian 3 May 83 pp 9-11

[Interview with Ivan Sifter, director of the Zagreb Pencil Factory, by Ljubomir Cucic: "It Is Time To Change the Record"; date and place not specified]

[Text] Ivan Sifter has been a director for more than three decades. He has held the first position at the Zagreb Pencil Factory for not quite 27 years, since far back in 1951. Aside from managing the work force of 800 of one of the most exemplary collectives in SR [Socialist Republic] Croatia, Sifter also holds other positions. He is president of the assembly of the General Association of the Croatian Chemical and Rubber Industry, a member of the Presidium of the Zagreb City Committee of SUBNOR [Federation of Associations of Veterans of the National Liberation War], of the republic Council for Health and Social Welfare Policy, of the assembly of the republic Self-Managing Community of Interest for Foreign Economic Relations, of the Zagreb City Conference of the Croatian SAWP, and so on. In all meetings, in his lectures, in articles and in professional publications Sifter distinguishes himself with his sharp-edged observations about the causes and nature of our economic troubles. The adequacy of the economic and political system is at the focus of his interest.

"When I say that construction of the political system has not been completed," Sifter told us, "I am thinking above all of us business executives and the place which we have in delegate decisionmaking. In the Federation today there is no chamber of associated labor, but all the conditions for the conduct of economic activity, from the foreign exchange regime to fiscal and monetary policy are determined at the federal level. The economy does not participate in discussions of this. Nor does the economy have true representatives in the other delegate structures. Under the regulations in effect the delegate cannot be a worker who has special authority. Since this is always the case of the best experts, people who are not sufficiently competent are sitting in the delegates' benches. The influence of economic organizations in federal bodies and agencies is negligible, and it is not altogether clear to me on what basis views are reconciled. The weaker the influence of the economy, the less self-management there is, the more government and administrative decisionmaking there will be."

[Question] Often in explanations of our economic troubles an attempt is made to put the blame on fragmented associated labor which has not been sufficiently knitted together.

[Answer] It is true that our economy is fragmented and that an economy like that cannot withstand the competition on the foreign market. A disintegrated economy is unproductive, disorganized and does not accumulate capital. Who is to blame for that? It seems to me that we wanted to introduce self-management overnight by passing laws. When in the early fifties we carried out decentralization of administration of the economy, all the responsibility passed from the government to the enterprises. Later in adopting the constitutional amendments and the Law on Associated Labor we forgot to establish the mechanisms and instruments for the functioning of the OUR [organization of associated labor] system, so that in time discipline slacked off in the economy and arbitrariness became stronger.

I hold that Article 320 of the Law on Associated Labor is untenable. Aside from the fact that the OOUR [basic organization of associated labor] must be an operating entity, it must also be an entity from the standpoint of technology, economic operation, self-management, personnel, development and organization. By and large we do not have such homogeneous units in the economy today. What we have OUR-ized is not yielding us the greatest benefits.

Our problem is that for some 20 years now we have been involved in reforms, but only today are we arriving at a long-range concept of economic development and the specific studies adopted by the Kraigher Commission, which, however, were also written without any sizable influence of the economy. In a way they are a compromise between politics and economic science. In addition they are incomplete, as can be best seen from the anti-inflation program, which included neither personal incomes, nor the issue of bank notes, nor the principles governing distribution of savings. Yet all of these are now large generators of inflation.

[Question] The principal feature of our development plans to date is that they have not fitted with one another. The republics and provinces have adopted their own development programs, and there have been cases when we built what we did not need and neglected what is vitally important to us.

[Answer] We will not be successful with stabilization until we have a single social plan, a common development goal. What we are doing now, this is patching up on the basis of intervention. A few years ago we cut back on coal production, yet we increased manufacturing capacity 3.6-fold. Instead of building a heavy chemical industry, machinebuilding and metallurgy, we have been building sugar mills, refineries, and so on. Each on his own! We have neglected energy, and this is taking cruel revenge on us. The Slovenes built several large hydroplants on the Drava, and there are 100 or so small power plants in private hands. At present Croatia has only plans on paper for such power plants.

As a practical matter Yugoslavia today has neither plan nor market nor economic system. Everyone does what he pleases, which accounts for the ever more frequent interventions of the government and the threats of temporary measures. We must set forth priorities in a social compact, and everyone must adapt to them. What we are doing today is therapy for the therapy, yet we have not registered the condition. A system of resolutions is no longer adequate to

guide development. Those resolutions are lists of desires written up without a sense of community and without responsibility. Our resolutions would have to be accompanied by balances, an exchange balance, an export-import balance, balances of government expenditure, investment expenditure and expenditure for social services, and so on. Those balances would have to have the force of law, and whoever does not respect them must be called to account. We have to have a market economy guided by a plan, but now we have neither the one nor the other. That is why our pooling of labor and capital is not showing the best progress either.

[Question] A wrongly oriented development policy has also brought us large foreign debts.

[Answer] True, but that is not the only cause. In the early seventies our economy was becoming ever more shut off and unconnected, there was no true economic collaboration among economic organizations. Production was falling off, and with it exports. The domestic market absorbed what we had been exporting, which accounts for a kind of consumer fever. All of that was followed by high prices of raw materials, petroleum above all, and we were forced to seek money abroad. Credits are only one form of that infusion. We also relied on the remittances of our workers abroad, not realizing that this could not be a permanent source of financial aid, whether because of the recession and ever greater unemployment or because of the lack of confidence of our people abroad toward banks here in the country. We placed great hopes on a tourist season lasting 3 months, and we did too little ourselves. How is it that Austria without a sea has an income of \$9 billion from tourism, but Yugoslavia only \$1 billion? Whereas in the West they take 1 year for construction and pay off the investment in 5 years, we spend 5 years in construction, but there is no way to pay off the investment. Is it possible that we, a maritime country, have not built a fishing fleet? Yes, it is. Today we are importing fish, and the Italians are fishing in our waters. We have built duplicate facilities, huge projects which promised income only in financial feasibility studies. All of this proves our inertness, irresponsibility and poor organization.

[Question] Does this mean that responsibility is the central question at the heart of our problems?

[Answer] Responsibility has been lacking in our country, since it was not built into the system. The public has been excluded from many decisions, and responsibility is still not perceived the same everywhere. There is a duality here. The director of a work organization, for example, is dismissed in 12 cases enumerated in the Law on Associated Labor, the workers' council can be dissolved, and receivership can be instituted, but no one can change structures outside the economy in the delegate and political system. We have to introduce equality here, and then we won't get cases like Obrovac, DINA, etc. At one time we had criticism and self-criticism, and then we abandoned self-criticism, and today we do not allow even criticism. Recently we imported enough light bulbs to meet the demand on the domestic market for 1 year, yet the Electric Lamp Factory in Zagreb is standing idle because it does not have the foreign exchange to import production materials. If no one answers for that, then we have utter anarchy.



[Question] Is the situation in agriculture the best proof of the errors in development?

[Answer] True. Croatia today has 780,000 hectares of fertile land that is not cultivated, 450,000 hectares of pastures and 800,000 hectares of forests that is 50-percent wooded. According to certain analyses, Yugoslavia is capable of feeding 60 million people. We are producing food for 17 million, and importing it for 5 million.

According to the figures, we have driven the size of the livestock population to the 1910 level! Back some 50 years ago the Yugoslav dinar was convertible exclusively on the basis of exports of meat and food. The average Yugoslav farmer produces food for 5 inhabitants, while in the United States the figure is 70. Or again, at best we produce 3.9 tons of food per farmer, and in the United States 126 tons. In our agriculture the socialized sector is inefficient, and the private sector held back. As though we were afraid of the rich peasant, of exploitation. The peasant can exploit only the land, and the more he exploits it, the better it is both for society and for him. Although it is clear to all of us that our agriculture today is the way it is because of our attitude toward the private farmer, we still keep the maximum landholding at 10 hectares. In the United States a family of 3 or 4 members cultivates 350 hectares and has yields per hectare which are twice as high as ours. Without additional manpower! If we cultivate the land, if we give the peasant incentives, then we can very quickly get out of these difficulties. The example of Slovenia confirms this quite well. For example, in Hungary the government gives credit for hogs, and the peasant repays it with piglets. Perhaps we might try something similar.

But there is no progress of agriculture without a different price policy. We must once and for all eliminate these perpetual disparities. Today we have 3,600 slaughterhouses running from fair to fair and knocking down the prices. We set a ceiling on meat prices, but livestock feed is getting more and more expensive. We are today siphoning income into other sectors at the expense of agriculture. I think we should undertake to put order once and for all in the question of prices in the reproduction cycle, but that also applies to other activities. We cannot restrict the price of furniture if there is no control on the price of logs.

[Question] The question of agriculture's development obviously touches upon the question of private ownership. But that is not the only problem in food production.

[Answer] In speaking about individual initiative I take as my point of departure a question which only seems superfluous at first glance: Is socialism a society of rich men or a society of poor men? I think that it is a society of men who are rich on the basis of a fairer distribution. Socialism is for me a system in which the means of production are mainly socialized, in which exploitation of man by man and of man by society has been precluded. Socialism presupposes a high personal and social standard of living. It seems to me that we have confused a bit the concepts of enrichment and exploitation. That system which yields lower personal incomes is more exploitative. A comparative

analysis would show that today the capitalist world is affording more economic freedom, more equality and justice than any socialism there is. A kind of ideological primitivism still prevails in our country. I remember that they taught me as a member of SKOJ [Communist Youth League of Yugoslavia] that a good communist proletarian is only someone who has nothing, and to prove that individuals would go around in tattered trousers. Unfortunately, something of that has persisted even today. As though we are afraid of the rich peasant, of a rich entrepreneur.

According to Marx, only that social system which gives room to full creative enthusiasm can win out. And we have objectively not created those conditions. Capitalism conquered feudalism because it yielded greater productivity, and socialism can win only if it offers larger production, better quality, and faster work than capitalism. We push the socialized sector, which, it is true, has achieved foreign progress, but it is also burdened with inefficiencies, losses, and so on. In order to aid those who could not get their bearings on the market we invented the joint reserve funds, but those are funds of idleness. By using them we have socialized losses, but we have nationalized profit. At the same time the private sector has been neglected. Yugoslavia could employ 1.5 million, five times more than now, in the small business sector. In that way alone, then, we would resolve the problem of unemployment. A recent example of these political prejudices of ours is what is happening with private medical practice. It is not clear to me why a physician can work with the assets owned by society, but cannot work with his own as a self-employed person. Yet the waiting rooms are still full, there are no drugs, and health care is poor.

[Question] Recently business executives have often complained about economic policy measures.

[Answer] I would put this under "believe it or not." It is now mid-April, and we still do not have conditions for conduct of economic activity, we are still laboring over the uniform criteria for allocation of foreign exchange. Now it will take us several more months to agree who will get what from the foreign exchange that is earned. And in that uncertainty, with the consequences with what is referred to as the "small" law on foreign exchange has had for the economy, we are supposed to undertake an expansion of exports!? The agreement on the uniform criteria is based on rounded-out vertical production groupings [that is, from the raw material to the finished product], but that will not be so easy in the chemical industry. The chemical workers cannot cover themselves, and they must turn to others. That is why I think that we should undertake the free pooling of labor and capital. But in any case anyone who exports will come out on the short end compared to the importers. Instead of aiding the exporters in an astute way, we are sticking with halfway solutions. For example, throughout the world import duties are used as a stimulus for export. But since our republics and provinces were unable to agree on financing the federal budget, we are using that money to fill the state treasury. The rate of exchange of the dinar, which we are now posting, is still not realistic, and it is a question when it will ever be, since in the economy twice the official value is being paid for the dollar even today. Even when it has foreign exchange, the economy cannot use it, since the banks

are not liquid. At this point I raise the question of reimbursing the losses to work organizations. Some producers are being abandoned by suppliers of production materials because they cannot pay for the goods on time. They are not interested in whether the work organization, the bank or the government is at fault. And while the economy is suffering huge damage, the government is taking its money at the rate of exchange, is paying off who knows whose credits, and production in the country is dropping off more and more. That is how the working class ends up with the beggar's staff. The economy is for all practical purposes in a situation of shutting down, nothing remains but the formal decision to that effect.

[Question] Where do we go from here?

[Answer] The situation in the economy is very difficult. But what are we doing? I say that in the last few years not a single right decision has been made on behalf of stabilization. Measures have been adopted one after the other, and the adverse effects have followed in the same succession. It is high time to change the attitude toward the economy, since it is the foundation of social progress. The economy is not asking for anything other than to terminate the measures which are impeding its normal conduct of business. The first thing needed is to leave as much foreign exchange as possible from exports to the economy to import raw materials and supplies and to finally know how much that is. We have to furnish this money even at the price of postponing repayment of foreign debts. We want to be free to enter into association with partners. This is not clear under the new enactments. Second, by the actions and decisions it has taken the state has greatly increased operating costs in the economy. The dinar has fallen an average of 68 percent against world currencies, debt service has risen 32 percent, social obligations charged to income have risen 25 percent, and approved prices have risen 30 percent. Someone must make up those costs to the economy, since otherwise we fall ever deeper into the abyss of illiquidity, low rate of accumulation and losses.

We ought to be more vigorous in opposing the rise of unproductive expenditures and excessive government costs. The drain on the economy for various purposes is today much higher in Yugoslavia than in the West. For that very reason our producer has no chance whatsoever on the western market. Behavior should be changed once and for all in investment policy as well. Decisions on investment must be made exclusively by associated labor on the basis of the priorities defined in social plans for long-range development.

But it is far more important for us to finally put the large army of the unemployed, young and educated people, to work and to begin to make fuller use of the factories we have built and our natural resources. This is precisely what we mean when we talk about relying on ourselves. Unless we set in motion our idle human, production and natural potential, we will never extricate ourselves. Yet if we succeed in that, we will not have to wait for 1986.

[Box, p 11]

### Zagreb Pencil Factory: A Brief Anatomy of Success

Today the Zagreb Pencil Factory has a work force of about 800. Last year it had earnings of 1.52 billion dinars, and this year an increase to 1.92 billion is planned. The foreign market, mainly the convertible market, takes up 8 percent of sales. The dependence on imports has dropped from 30 to 11 percent thanks to the persistent exploratory effort and endeavors over many years. A large contribution to this effort was made by the 39 private subcontractors, entrepreneurs, most of them people who have returned from temporary employment abroad. In their own workshops they are today producing for the pencil factory what was previously imported.

Back 18 years ago the factory had an output per worker of 3 million dinars, while today it is 240 million. That is about 2 percent more than in similar factories in the West. Over the last 10 years the number of officeworkers has dropped by 208. They have mainly moved into production, and their jobs have been taken over by managers, supervisors and OOUR directors. Such efforts are accompanied also by an appropriate regulation on remuneration, which stimulates not only work, but also innovation. Any idleness is penalized, financially above all. At the same time, certain nonfinancial forms have also been introduced (challenge banners for the best worker, interviews for the factory newspaper, etc.). The quotas are high in the factory, but they are still exceeded. The average personal income today is 17,000 dinars.

Thanks to this kind of discipline, all the work organization's funds are full. In 1969 a new factory was built exclusively with its own money. Today the Zagreb Pencil Factory does not owe anyone either a dinar or a dollar.

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